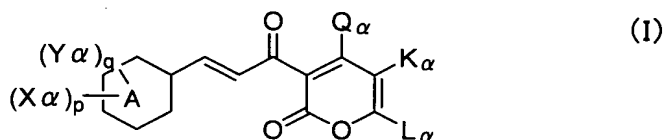


CLAIMS

1. A cinnamoyl compound represented by the formula (I):



wherein

I. A represents a benzene ring or a pyridine ring; and in
 5 (Y_α)_q, Y_α is a substituent on a carbon atom and represents a
 group included in the following X₀ group or Y₀ group, q
 represents 0, 1, 2, 3 or 4, and Y_αs are the same or
 different when q is 2 or more and the adjacent two same or
 different Y_αs together may form a group included in the Z₀
 10 group to be fused to the A ring when q is 2 or more; and in
 (X_α)_p, X_α represents a substituent on a carbon atom which
 does not belong to the following X₀ group, Y₀ group and Z₀
 group, p represents 1, 2, 3, 4 or 5, and X_αs may be the
 same or different when p is 2 or more; and the sum of p and
 15 q is 5 or less;

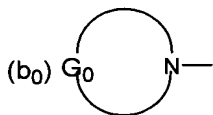
(1) the X₀ group: a M_a-group, wherein M_a represents a
 R_b- group (wherein R_b represents a C1-C10 alkyl group
 optionally substituted with a halogen atom), a halogen atom,
 a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-
 20 group (wherein R_c represents a C1-C10 alkyl group
 optionally substituted with a halogen atom, B_a represents

an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d- group (wherein R_d is as defined above), a R_e-CO-R_d- group (wherein R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a $R_e-CO-O-R_d-$ group (wherein R_e and R_d are as defined above), a $R_eO-CO-R_d-$ group (wherein R_e and R_d are as defined above), a $HO-CO-CH=CH-$ group, a $R_eR_e'N-R_d-$ group (wherein R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as R_e has, and R_d is as defined above), a $R_e-CO-NR_e'-R_d-$ group (wherein R_e , R_e' and R_d are as defined above), a $R_bO-CO-N(R_e)-R_d-$ group (wherein R_b , R_e and R_d are as defined above), a $R_eR_e'N-CO-R_d-$ group (wherein R_e , R_e' and R_d are as defined above), a $R_eR_e'N-CO-NR_e''-R_d-$ group (wherein R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as R_e has, and R_d is as defined above), a $R_eR_e'N-C(=NR_e'')-NR_e'''-R_d-$ group (wherein R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as R_e has, and R_d is as defined above), a $R_b-SO_2-NR_e-R_d-$ group (wherein R_b , R_e and R_d are as defined above), a $R_eR_e'N-SO_2-R_d-$ group (wherein R_e , R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group;

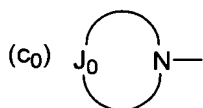
(2) the Y_0 group: a $M_{b0}-R_d-$ group, wherein M_{b0}

represents a M_{c0} - group

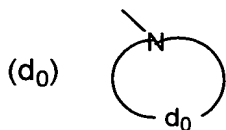
[wherein M_{c0} represents a M_{d0} - R_d' - group [wherein M_{d0} represents a 6 to 10-membered aryl group optionally substituted with a M_a - group (wherein M_a is as defined above), a 5 to 10-membered heteroaryl group optionally substituted with a M_a -group (wherein M_a is as defined above), a 3 to 10-membered cyclic hydrocarbon or heterocyclic group optionally substituted with a M_a - group (wherein M_a is as defined above) and optionally containing an unsaturated bond, a (b_0) - group



(in the (b_0) - group, G_0 forms an optionally substituted, saturated or unsaturated, nonaromatic 5 to 14-membered cyclic hydrocarbon or heterocyclic ring), a (c_0) - group

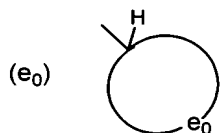


(in the (c_0) - group, J_0 forms a 5 to 7-membered aromatic ring optionally containing a nitrogen atom), a (d_0) - group



[wherein d_0 forms a 5 to 12-membered hydrocarbon ring which is substituted with a carbonyl group or a thiocarbonyl group and further which may be optionally substituted with an oxy group, a thio group, a $-NR_1$ - group (wherein R_1

represents a hydrogen atom, a C1-C10 alkyl group, a C2-C10 alkyl group substituted with a halogen atom or a R₂-B₁-group (wherein R₂ represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B₁ represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, a sulfinyl group or a sulfonyl group] or a (e₀)- group



{wherein e₀ forms a 5 to 12-membered hydrocarbon ring optionally substituted with a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a -NR₁-group (wherein R₁ is as defined above), a sulfinyl group or a sulfonyl group}; and R_d' is the same as or different from R_d and has the same meaning as R_d has]],

a M_{c0}-B_a- group (wherein M_{c0} and B_a are as defined above), a M_{c0}-CO- group (wherein M_{c0} is as defined above), a M_{c0}-CO-O- group (wherein M_{c0} is as defined above), a M_{c0}O-CO- group (wherein M_{c0} is as defined above), a M_{c0}R_eN- group (wherein M_{c0} and R_e are as defined above), a M_{c0}-CO-NR_e- group (wherein M_{c0} and R_e are as defined above), a M_{c0}O-CO-NR_e- group (wherein M_{c0} and R_e are as defined above), a M_{c0}R_eN-CO- group (wherein M_{c0} and R_e are as defined above), a M_{c0}R_eN-CO-NR_e'- group (wherein M_{c0}, R_e and R_e' are as defined above), a M_{c0}R_eN-C(=NR_e')-NR_e''- group (wherein M_{c0}, R_e, R_e' and R_e''

are as defined above), a $M_{C0}-SO_2-NR_e-$ group (wherein M_{C0} and R_e are as defined above) or a $M_{C0}R_eN-SO_2-$ group (wherein M_{C0} and R_e are as defined above), and R_d is as defined above;

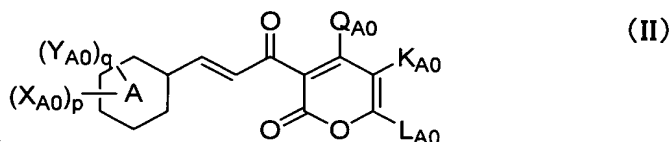
5 (3) the Z_0 group: a 5 to 12-membered cyclic hydrocarbon or heterocyclic ring optionally substituted with a halogen atom, a C1-C10 alkoxy group, a C3-C10 alkenyloxy group, a C3-C10 alkynyloxy group, a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a
10 sulfinyl group or a sulfonyl group, which is an aromatic or nonaromatic and monocyclic or fused ring and which is fused to the A ring;

II. Q_α represents an optionally substituted hydroxy group, or an optionally substituted amino group;

15 III. K_α and L_α are the same or different, and represent a hydrogen atom, or a substituent on a carbon atom, or K_α and L_α may form a C1-C10 alkylene group optionally having a substituent or a C1-C10 alkenylene group optionally having a substituent; and

20 the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected
25 is the same, selected substituents may be the same or different as long as they are selected within the range;

2. A cinnamoyl compound represented by the formula (II):



wherein

I. A represents a benzene ring or a pyridine ring;

5 II. in $(X_{A0})_p$, X_{A0} is a substituent on a carbon atom and represents a group included in any group of the following A_0 to N_0 groups, p represents 1, 2, 3, 4 or 5, and when p is 2 or more, X_{A0} s are the same or different;

(1) the A_0 group:

10 a D_1-R_4 - group [wherein D_1 represents a $(R_1-(O)_k)-A_1N-(O)_k$ - group [wherein R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1 -group (wherein R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10

15 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group, k represents 0 or 1, A_1 represents a $R_3-(CHR_0)_m-(B_2-B_3)_m$ - group {wherein R_3 represents a hydrogen atom, or a C1-C10 alkyl group

20 optionally substituted with a halogen atom or a R_2-B_1 -

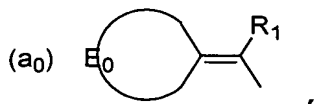
group (wherein R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m represents 0 or 1, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')$ - group (wherein R_1' is the same as or different from R_1 , and has the same meaning as R_1 has, and n represents 0 or 1), B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, m' represents 0 or 1, and when B_3 is a sulfonyl group, it does not occur that m is 0 and R_3 is a hydrogen atom at the same time}, and k' represents 0 or 1], and R_4 represents a C1-C10 alkylene group, provided that a $R_0'R_0''N-R_4$ - group (wherein R_0' and R_0'' are the same as or different from R_0 and have the same meaning as R_0 has, and R_4 is as defined above) is excluded],

a D_2-R_4 - group[wherein D_2 represents a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ - group (wherein R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)$ - group (wherein A_1 and R_2 are as defined above) or a NH_2-CS - group, and R_4 is as defined above],

a D_3-R_4 - group[wherein D_3 represents a nitro group or a R_1OSO_2 - group (wherein R_1 is as defined above), and R_4 is as defined above], or

a R_1OSO_2 - group[wherein R_1 is as defined above];

(2) the B_0 group: an (a_0) - group

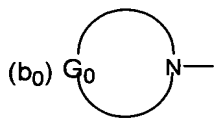


in the (a₀)- group, E₀ forms an optionally substituted, saturated or unsaturated, aromatic or nonaromatic 5 to 14-membered cyclic hydrocarbon or heterocyclic ring, and R₁ is as defined above;

(3) the C₀ group: a C₂-C₁₀ alkenyl group substituted with a halogen atom, a R₂-B₁- group (wherein R₂ and B₁ are as defined above), a D₄-R₄- group [wherein D₄ represents a hydroxy group or an A₁-O- group (wherein A₁ is as defined above), and R₄ is as defined above], a D₅- group [wherein D₅ represents a O=C(R₃)- group (wherein R₃ is as defined above), an A₁-(O)_n-N=C(R₃)- group (wherein A₁, n and R₃ are as defined above), a R₁-B₀-CO-R₄-(O)_n-N=C(R₃)- group {wherein R₁, R₄, n and R₃ are as defined above, and B₀ represents an oxy group, a thio group or a -N((O)_mR₁')- group (wherein R₁' and m are as defined above)}, a D₂-R₄-(O)_n-N=C(R₃)- group (wherein D₂, R₄, n and R₃ are as defined above) or a R₁A₁N-N=C(R₃)- group (wherein R₁, A₁ and R₃ are as defined above)], a R₁A₁N-O-R₄- group (wherein R₁, A₁ and R₄ are as defined above), a R₁(A₁-(O)_n-)N- group (wherein R₁, A₁ and n are as defined above), a D₂- group (wherein D₂ is as defined above) or a D₃- group (wherein D₃ is as defined above);

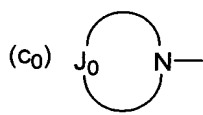
(4) the D₀ group: a C₂-C₁₀ alkynyl group substituted

with a (b_0) - R_4 - group (in (b_0))



G_0 forms an optionally substituted, saturated or unsaturated, nonaromatic 5 to 14-membered cyclic

5 hydrocarbon or heterocyclic ring), a (c_0) - R_4 - group (in (c_0))



J_0 forms an aromatic 5 to 7-membered ring optionally containing a nitrogen atom and R_4 is as defined above), a halogen atom, a R_2 - B_1 - R_4 - group (wherein R_2 , B_1 and R_4 are as defined above), a D_4 - R_4 - group (wherein D_4 and R_4 are as defined above), a D_5 - group (wherein D_5 is as defined above), a D_1 - R_4 - group (wherein D_1 and R_4 are as defined above), a D_2 - group (wherein D_2 is as defined above) or a D_3 - R_4 - group (wherein D_3 and R_4 are as defined above);

15 (5) the E_0 group: an A_2 -CO- R_5 - group, provided that R_5 is not a vinylene group when A_2 is a hydroxy group, wherein A_2 represents

(i) an A_3 - B_4 - group

wherein A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_{a0} -(R_4)_m- group (wherein R_{a0} represents

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an optionally substituted 5 to 7-membered aryl group or heteroaryl group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b_0) - R_4 - group (wherein (b_0) and R_4 are as defined above), a (c_0) - R_4 - group (wherein (c_0) and R_4 are as defined above), a R_2 - B_1 - R_4 - group (wherein R_2 , B_1 and R_4 are as defined above), a D_4 - R_4 - group (wherein D_4 and R_4 are as defined above), a D_5 - group (wherein D_5 is as defined above), a D_1 - R_4 - group (wherein D_1 and R_4 are as defined above), a D_2 - group (wherein D_2 is as defined above), a D_3 - R_4 - group (wherein D_3 and R_4 are as defined above) or an A_4 - SO_2 - R_4 - group {wherein A_4 represents a (b_0) - group (wherein (b_0) is as defined above), a (c_0) - group (wherein (c_0) is as defined above) or a R_1R_1' -N- group (wherein R_1 and R_1' are as defined above), and R_4 is as defined above}, and

B_4 represents an oxy group, a thio group or a $N((O)_mR_1)$ - group (wherein R_1 and m are as defined above), provided that A_3 is not a hydrogen atom when B_4 is a thio group;

(ii) a R_1 - B_4 -CO- R_4 - B_4' - group, wherein R_1 , B_4 and R_4 are as defined above, B_4' is the same as or different from B_4 and has the same meaning as B_4 has, provided that R_2 is not a hydrogen atom when B_4 is a thio group, or

a D_2 - R_4 - B_4 - group, wherein D_2 , R_4 and B_4 are as defined above;

(iii) a $R_2\text{-SO}_2\text{-NR}_1\text{-}$ group, wherein R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above;

(iv) a $(b_0)\text{-}$ group, wherein (b_0) is as defined above;

5 (v) a $(c_0)\text{-}$ group, wherein (c_0) is as defined above;

or

(vi) a $R_1A_1N\text{-NR}_1'\text{-}$ group, wherein R_1 , A_1 and R_1' are as defined above; and

R_5 represents a C2-C10 alkenylene group optionally
10 substituted with a halogen atom or a C2-C10 alkynylene group;

(6) the F_0 group: an $A_5\text{-B}_5\text{-R}_6\text{-}$ group

wherein A_5 represents a C2-C10 alkyl group substituted
with a $D_4\text{-}$ group (wherein D_4 is as defined above), a $D_1\text{-}$
15 group (wherein D_1 is as defined above), a $D_3\text{-}$ group
(wherein D_3 is as defined above) or an $A_4\text{-SO}_2\text{-}$ group
(wherein A_4 is as defined above), or a C1-C10 alkyl group
substituted with a $R_2\text{-B}_1\text{-}$ group (wherein R_2 and B_1 are as
defined above), a $D_2\text{-}$ group (wherein D_2 is as defined
20 above), a $D_5\text{-}$ group (wherein D_5 is as defined above) or an
 $A_2\text{-CO-}$ group (wherein A_2 is as defined above),

B_5 represents a $B_1\text{-}$ group (wherein B_1 is as defined
above) or a $\text{-NA}_1\text{-}$ group (wherein A_1 is as defined above),
and

25 R_6 represents a single bond or a C1-C10 alkylené

group;

(7) the G_0 group: an $A_6-B_5-R_6-$ group

wherein A_6 represents an $(a_0)-R_4-$ group (wherein (a_0) and R_4 are as defined above), or a C2-C10 alkenyl group, or
 5 a C2-C10 alkynyl group, or a C2-C10 alkenyl group substituted with a halogen atom, a R_2-B_1- group (wherein R_2 and B_1 are as defined above), a D_5- group (wherein D_5 is as defined above), a D_2- group (wherein D_2 is as defined above) or an A_2-CO- group (wherein A_2 is as defined above) ,
 10 or a C2-C10 alkynyl group substituted with a halogen atom, a R_2-B_1- group (wherein R_2 and B_1 are as defined above), a D_5- group (wherein D_5 is as defined above), D_2- group (wherein D_2 is as defined above) or an A_2-CO- group (wherein A_2 is as defined above), or a C3-C10 alkenyl
 15 group substituted with a $(b_0)-$ group (wherein (b_0) is as defined above), a $(c_0)-$ group (wherein (c_0) is as defined above), a D_4- group (wherein D_4 is as defined above), a D_1- group (wherein D_1 is as defined above) or a D_3- group (wherein D_3 is as defined above), or a C3-C10 alkynyl group
 20 substituted with a D_4- group (wherein D_4 is as defined above), a D_1- group (wherein D_1 is as defined above) or a D_3- group (wherein D_3 is as defined above), and

B_5 and R_6 are as defined above;

(8) the H_0 group:

25 a $D_2-N(-(O)_n-A_1)-R_6-$ group (wherein D_2 , n , A_1 and R_6 are

as defined above),

a D_2 - group (wherein D_2 is as defined above, provided that a cyano group is excluded),

5 a $R_1(R_1'(O)_n)N-CR_1''=N-R_6$ - group (wherein R_1 , R_1' , n and R_6 are as defined above, R_1'' is the same as or different from R_1 and has the same meaning as that of R_1),

a $R_1-(O)_n-N=CR_1'-NR_2-R_6$ - group (wherein R_1 , n , R_1' , R_2 and R_6 are as defined above),

10 a $R_2-B_3-NR_1-CO-NR_1'-R_6$ - group (wherein R_2 , B_3 , R_1 , R_1' and R_6 are as defined above),

a $D_2-CO-NR_1-R_6$ - group (wherein D_2 , R_1 and R_6 are as defined above) or

an $A_2-COCO-NR_1-R_6$ - group (wherein A_2 , R_1 and R_6 are as defined above);

15 (9) the I_0 group:

an $A_7-B_6-N((O)_nR_1)-R_6$ - group [wherein A_7 represents a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C2-C10 alkynyl group, or a C3-C10 haloalkynyl group, or a $R_2-B_1-R_4$ - group (wherein R_2 , B_1 and R_4 are as defined above), or a D_4-R_4 - group (wherein D_4 and R_4 are as defined above), or a D_5-R_4 - group (wherein D_5 and R_4 are as defined above), or a D_1-R_4 - group (wherein D_1 and R_4 are as defined above), or a $(b_0)-R_4$ - group (wherein (b_0) and R_4 are as defined above), or a $(c_0)-R_4$ - group (wherein (c_0) and R_4 are as defined above), or a D_2-R_4 - group (wherein D_2 and R_4

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are as defined above), or a D_3-R_4- group (wherein D_3 and R_4 are as defined above), or an $A_4-SO_2-R_4-$ group (wherein A_4 and R_4 are as defined above), or an A_2-CO-R_4- group (wherein A_2 and R_4 are as defined above), B_6 represents a carbonyl group or a thiocarbonyl group, and n , R_1 and R_6 are as defined above],

an $A_8-CS-N((O)_nR_1)-R_6-$ group [wherein A_8 represents a hydrogen atom or a C1-C10 alkyl group optionally substituted with a halogen atom, and n , R_1 and R_4 are as defined above],

an $A_7'-B_2'-B_3-N((O)_nR_1)-R_6-$ group [wherein A_7' represents a C3-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a $R_2-B_1-R_4'-$ group (wherein R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), or a $D_4-R_4'-$ group (wherein D_4 and R_4' are as defined above), or a $D_1-R_4'-$ group (wherein D_1 and R_4' are as defined above), or a $(b_0)-R_4'-$ group (wherein (b_0) and R_4' are as defined above), or a $(c_0)-R_4'-$ group (wherein (c_0) and R_4' are as defined above), or a D_2-R_4- group (wherein D_2 and R_4 are as defined above), or a $D_3-R_4'-$ group (wherein D_3 and R_4' are as defined above), or an A_2-CO-R_4- group (wherein A_2 and R_4 are as defined above), B_2' represents an oxy group, a thio group or a $-N((O)_nR_1')-$ group (wherein n' is the same as or different from n and

has the same meaning as that of n , and R_1' is as defined above), and B_3 , n , R_1 and R_6 are as defined above],

an $A_8'-B_2'-CS-N((O)_nR_1)-R_6-$ group [wherein A_8' represents a C1-C10 alkyl group or a C2-C10 haloalkyl group, B_2' is as defined above, and n , R_1 and R_6 are as defined above],

an $A_8'-S-B_3'-N((O)_nR_1)-R_6-$ group [wherein A_8' , n , R_1 and R_6 are as defined above, and B_3' represents a carbonyl group or a sulfonyl group] or

an $A_7''-SO_2-N((O)_nR_1)-R_6-$ group [wherein A_7'' represents a C2-C10 alkenyl group, or a C3-C10 alkenyl group substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a $R_2-B_1-R_4'-$ group (wherein R_2 , B_1 and R_4' are as defined above), or a $D_4-R_4'-$ group (wherein D_4 and R_4' are as defined above), or a D_5-R_4- group (wherein D_5 and R_4 are as defined above), or a $D_1-R_4'-$ group (wherein D_1 and R_4' are as defined above), or a $(b_0)-R_4'-$ group (wherein (b_0) and R_4' are as defined above), or a $(c_0)-R_4'-$ group (wherein (c_0) and R_4' are as defined above), or a D_2-R_4- group (wherein D_2 and R_4 are as defined above), or a NO_2-R_4- group (wherein R_4 is as defined above), or an A_2-CO-R_4- group (wherein A_2 and R_4 are as defined above), and n , R_1 and R_6 are as defined above];

(10) the J_0 group:

an A_7-CO- group (wherein A_7 is as defined above),

an A_9 -CS- group (wherein A_9 represents A_7 or A_8),

an $A_9'(O)_mN=C(A_9)$ - group (wherein A_9' represents A_7' or A_8' , and m and A_9 are as defined above),

a D_2 -CO- group (wherein D_2 is as defined above),

5 an A_2 -COCO- group (wherein A_2 is as defined above),

an A_9 -CO- B_1' - R_6 - group (wherein A_9 and R_6 are as defined above, and B_1' represents an oxy group or a thio group, provided that A_9 is not A_8 when B_1' is an oxy group),

10 an A_9 -CS- B_1' - R_6 - group (wherein A_9 , B_1' and R_6 are as defined above),

an A_7'' -SO₂- B_1' - R_6 - group (wherein A_7'' , B_1' and R_6 are as defined above),

an A_8 -SO₂- B_1' - R_6 - group (wherein A_8 , B_1' and R_6 are as defined above, provided that A_8 is not a hydrogen atom),

15 an A_9' - B_2' - B_3 - B_1' - R_6 - group (wherein A_9' , B_2' , B_3 , B_1' and R_6 are as defined above), or

a C₂-C₁₀ alkenyl group substituted with a (b_0) - group (wherein (b_0) is as defined above) or a (c_0) - group (wherein (c_0) is as defined above);

20 (11) the K_0 group: an A_{10} -N((O)_n R_1)-CO- R_6 - group

wherein A_{10} represents a hydrogen atom (provided that n is not 0), an A_7'' -SO₂- group (wherein A_7'' is as defined above), an A_8 -SO₂- group (wherein A_8 is as defined above, provided that A_8 is not a hydrogen atom), an $A_9'O$ - group

25 (wherein A_9' is as defined above, provided that n is not 1),

an A_9' - group (wherein A_9' is as defined above, provided that A_8' is excluded when n is 0), a R_2OCH_2 - group (wherein R_2 is as defined above), an A_2-CO-R_4 - group (wherein A_2 and R_4 are as defined above) or an $A_2-CO-CH(CH_2CO-A_2)$ - group (wherein A_2 is as defined above), and n , R_1 and R_6 are as defined above;

(12) the L_0 group:

an $A_{10}'-N((O)_nR_1)-SO_2-R_6$ - group [wherein A_{10}' represents a hydrogen atom (provided that n is not 0), an $A_9'O$ - group (wherein A_9' is as defined above, provided that n is not 1), an A_9' - group (wherein A_9' is as defined above, provided that A_8' is excluded when n is 0), a R_2-CO - group (wherein R_2 is as defined above), an A_2-CO-R_4 - group (wherein A_2 and R_4 are as defined above) or an $A_2-CO-CH(CH_2CO-A_2)$ - group (wherein A_2 is as defined above), and n , R_1 and R_6 are as defined above],

an $A_9''R_1N-SO_2-N((O)_nR_1')-R_6$ - group [wherein A_9'' represents a hydrogen atom or an A_9' - group (wherein A_9' is as defined above), and R_1 , n , R_1' and R_6 are as defined above] or

a $(b_0)-SO_2-N((O)_nR_1')-R_6$ - group [wherein (b_0) , n , R_1' and R_6 are as defined above];

(13) the M_0 group:

a $R_1(R_2S)C=N-R_6$ - group (wherein R_1 , R_2 and R_6 are as defined above),

a $R_2B(R_2'B')C=N-R_6-$ group (wherein R_2 and R_6 are as defined above, R_2' is the same as or different from R_2 and has the same meaning as that of R_2 , and B and B' are the same or different and represent an oxy group or a thio group),

a $R_1R_1'N-(R_2S)C=N-R_6-$ group (wherein R_1 , R_1' , R_2 and R_6 are as defined above),

a $R_1N=C(SR_2)-NR_2'-R_6-$ group (wherein R_1 , R_2 , R_2' and R_6 are as defined above) or

a $R_1(R_1'O)N-R_6-$ group (wherein R_1 , R_1' and R_6 are as defined above);

(14) the N_0 group: a $A_{11}-P(=O)(OR_1')-R_4-$ group

wherein A_{11} represents a R_1- group (wherein R_1 is as defined above), a R_1O-R_6- group (wherein R_1 and R_6 are as defined above) or a $R_1OCO-CHR_0-$ group (wherein R_1 and R_0 are as defined above), and R_1' and R_4 are as defined above;

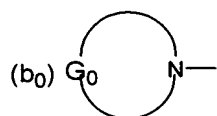
III. in $(Y_{A0})_q$, Y_{A0} is a substituent on a carbon atom and represents a group included in the following X_0 group and Y_0 group, q represents 0, 1, 2, 3 or 4, the sum of p (wherein p is as defined above) and q is 5 or less, Y_{A0} s are the same as or different when q is 2 or more, and the adjacent two same or different Y_{A0} s may form a group included in the Z_0 group to be fused to the A ring when q is 2 or more;

(1) the X_0 group: a M_a - group, wherein M_a represents a R_b - group (wherein R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c - B_a - R_d - group (wherein R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d - group (wherein R_d is as defined above), a R_e -CO- R_d - group (wherein R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e -CO-O- R_d - group (wherein R_e and R_d are as defined above), a R_e O-CO- R_d - group (wherein R_e and R_d are as defined above), a HO-CO-CH=CH- group, a R_eR_e' N- R_d - group (wherein R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as R_e has, and R_d is as defined above), a R_e -CO-N R_e' - R_d - group (wherein R_e , R_e' and R_d are as defined above), a R_b O-CO-N(R_e)- R_d - group (wherein R_b , R_e and R_d are as defined above), a R_eR_e' N-CO- R_d - group (wherein R_e , R_e' and R_d are as defined above), a R_eR_e' N-CO-N R_e'' - R_d - group (wherein R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as R_e has, and R_d is as defined above), a R_eR_e' N-C(=N R_e'')-N R_e''' - R_d - group (wherein R_e , R_e' , R_e'' and R_e''' are the same or different,

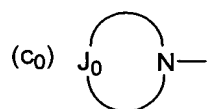
R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as R_e has, and R_d is as defined above), a R_b -SO₂-NR_e-R_d- group (wherein R_b , R_e and R_d are as defined above), a $R_e R_e' N$ -SO₂-R_d- group (wherein R_e , R_e' and R_d are as defined above), a C₂-C₁₀ alkenyl group or a C₂-C₁₀ alkynyl group;

(2) the Y_0 group: a M_{b0} -R_d- group, wherein M_{b0} represents a M_{c0} - group

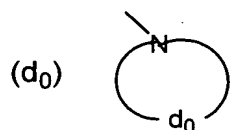
[wherein M_{c0} represents a M_{d0} -R_d'- group [wherein M_{d0} represents a 6 to 10-membered aryl group optionally substituted with a M_a - group (wherein M_a is as defined above), a 5 to 10-membered heteroaryl group optionally substituted with a M_a - group (wherein M_a is as defined above), a 3 to 10-membered cyclic hydrocarbon or heterocyclic group which is optionally substituted with a M_a - group (wherein M_a is as defined above) and which optionally contains an unsaturated bond, or a (b_0)- group



(wherein (b_0) forms as defined above), a (c_0)- group



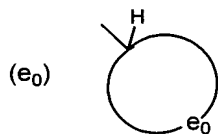
(wherein (c_0) forms as defined above), a (d_0)-group



{wherein d_0 forms a 5 to 12-membered hydrocarbon ring which

is substituted with a carbonyl group or a thiocarbonyl group and further which may be optionally substituted with an oxy group, a thio group, a $-NR_1-$ group (wherein R_1 is as defined above), a sulfinyl group or a sulfonyl group} or a

5 $(e_0)-$ group



{wherein e_0 forms a 5 to 12-membered hydrocarbon ring optionally substituted with a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a $-NR_1-$ group (wherein R_1 is as defined above), a sulfinyl group or a sulfonyl group}, and R_d' is the same as or different from R_d and has the same meaning as R_d has]],

a $M_{c0}-B_a-$ group (wherein M_{c0} and B_a are as defined above), a $M_{c0}-CO-$ group (wherein M_{c0} is as defined above), a $M_{c0}-CO-O-$ group (wherein M_{c0} is as defined above), a $M_{c0}O-CO-$ group (wherein M_{c0} is as defined above), a $M_{c0}R_eN-$ group (wherein M_{c0} and R_e are as defined above), a $M_{c0}-CO-NR_e-$ group (wherein M_{c0} and R_e are as defined above), a $M_{c0}O-CO-NR_e-$ group (wherein M_{c0} and R_e are as defined above), a $M_{c0}R_eN-CO-$ group (wherein M_{c0} and R_e are as defined above), a $M_{c0}R_eN-CO-NR_e'-$ group (wherein M_{c0} , R_e and R_e' are as defined above), a $M_{c0}R_eN-C(=NR_e')-NR_e''-$ group (wherein M_{c0} , R_e , R_e' and R_e'' are as defined above), a $M_{c0}-SO_2-NR_e-$ group (wherein M_{c0} and R_e are as defined above) or a $M_{c0}R_eN-SO_2-$ group (wherein M_{c0}

10

15

20

and R_e are as defined above), and

R_d is as defined above;

(3) the Z_0 group: a 5 to 12-membered cyclic hydrocarbon or heterocyclic ring optionally substituted with a halogen atom, a C1-C10 alkoxy group, a C3-C10 alkenyloxy group, a C3-C10 alkynyloxy group, a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a sulfinyl group or a sulfonyl group, which is an aromatic or nonaromatic and monocyclic or fused ring and which is fused to the A ring;

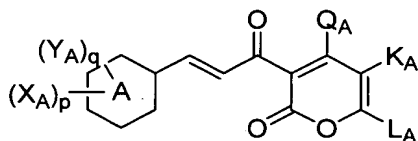
IV. Q_{A0} represents a hydroxyl group, a (b_0) - group (wherein (b_0) is as defined above), an $A_9-B_6-B_c$ - group [wherein A_9 and B_6 are as defined above, and B_c represent an oxy group or a $-N((O)_mR_1)-$ group (wherein m and R_1 are as defined above), provided that B_c is not a sulfonyl group when A_9 is a hydrogen atom], an $A_7''-SO_2-B_c$ - group (wherein A_7'' and B_c are as defined above), an $A_8-SO_2-B_c$ - group (wherein A_8 and B_c are as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$ - group (wherein R_1 , R_1' and B_c are as defined above), a $(b_0)-SO_2-B_c$ - group (wherein (b_0) and B_c are as defined above), an $A_9'-B_c$ - group (wherein A_9' and B_c are as defined above), a $D_5-R_4-B_c$ - group (wherein D_5 , R_4 and B_c are as defined above), a $M_{C0}-B_3-B_c$ - group (wherein M_{C0} , B_3 and B_c are as defined above) or a $M_{C0}-B_c$ - group (wherein M_{C0} and B_c are as defined above);

V. K_{A0} represents a hydrogen atom, a halogen atom, or a C10 alkyl group, L_{A0} represents a hydrogen atom, or a M_{b0} -group (M_{b0} is as defined above), or K_{A0} and L_{A0} may form a C1-C10 alkylene group, or a C1-C10 alkenylene group optionally substituted with single or the same or different plural M_a groups; and

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

3. A cinnamoyl compound represented by the formula (III):

(III)



wherein

I. A represents a benzene ring or a pyridine ring;

II. in $(X_A)_p$, X_A is a substituent on a carbon atom and

represents a group included in any group or the following A

to N groups, p represents 1, 2, 3, 4 or 5, and, X_A s are the same or different when p is 2 or more,

(1) the A group:

a D_1-R_4- group, wherein D_1 represents a $(R_1-(O)_k-(A_1N-(O)_{k'}- group [wherein R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1- group (wherein R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group, k represents 0 or 1, A_1 represents a $R_3-(CHR_0)_m-(B_2-B_3)_{m'}-$ group {wherein R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1- group (wherein R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m represents 0 or 1, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')-$ group (wherein R_1' is the same as or different from R_1 and has the same meaning as R_1 has, and n represents 0 or 1), B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, m' represents 0 or 1, and when B_3 is a sulfonyl group, it does not occur that m is 0 and R_3 is a hydrogen atom at the same time}, and k' represents 0 or 1], and $R_4$$

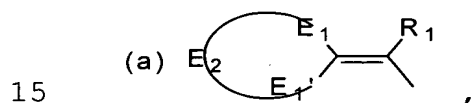
represents a C1-C10 alkylene group, provided that a $R_0'R_0''N-R_4$ -group (wherein R_0' and R_0'' are the same as or different from R_0 and has the same meaning as R_0 has, and R_4 is as defined above) is excluded,

5 a D_2-R_4 - group, wherein D_2 represents a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$ -group (wherein R_1 , R_1' , n and A_1 are as defined above), an $A_1N=C(-OR_2)$ -group (wherein A_1 and R_2 are as defined above) or a NH_2-CS -group, and R_4 is as defined above,

10 a D_3-R_4 - group, wherein D_3 represents a nitro group or a R_1OSO_2 - group (wherein R_1 is as defined above), and R_4 is as defined above, or

a R_1OSO_2 - group, wherein R_1 is as defined above;

(2) the B group: an (a)-group

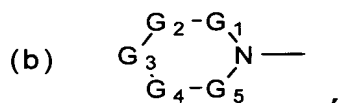


in (a), E_1 and E_1' represent a methylene group optionally substituted with a C1-C10 alkyl group or a C1-C10 alkoxy group, or a carbonyl group, provided that E_1 and E_1' are not a carbonyl group at the same time, E_2 represents a C2-C10 alkylene group optionally substituted with an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a -
20 NR_1' - group (wherein R_1' is as defined above), or a C3-C10 alkenylene group optionally substituted with an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a -

NR_1' - group (wherein R_1' is as defined above), and R_1 is as defined above;

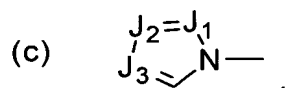
(3) the C group: a C2-C10 alkenyl group substituted with a halogen atom, a $\text{R}_2\text{-B}_1$ - group (wherein R_2 and B_1 are as defined above), a $\text{D}_4\text{-R}_4$ - group [wherein D_4 represents a hydroxyl group or an $\text{A}_1\text{-O}$ - group (wherein A_1 is as defined above), and R_4 is as defined above], a D_5 - group [wherein D_5 represents an $\text{O}=\text{C}(\text{R}_3)$ - group (wherein R_3 is as defined above), an $\text{A}_1\text{-(O)}_n\text{-N}=\text{C}(\text{R}_3)$ - group (wherein A_1 , n and R_3 are as defined above), a $\text{R}_1\text{-B}_0\text{-CO-R}_4\text{-(O)}_n\text{-N}=\text{C}(\text{R}_3)$ - group {wherein R_1 , R_4 , n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $\text{-N((O)}_m\text{R}_1')$ - group (wherein R_1' and m are as defined above)}, a $\text{D}_2\text{-R}_4\text{-(O)}_n\text{-N}=\text{C}(\text{R}_3)$ - group (wherein D_2 , R_4 , n and R_3 are as defined above) or a $\text{R}_1\text{A}_1\text{N-N}=\text{C}(\text{R}_3)$ - group (wherein R_1 , A_1 and R_3 are as defined above)], a $\text{R}_1\text{A}_1\text{N-O-R}_4$ - group (wherein R_1 , A_1 and R_4 are as defined above), a $\text{R}_1\text{ (A}_1\text{-(O)}_n\text{)-N}$ - group (wherein R_1 , A_1 and n are as defined above), a D_2 - group (wherein D_2 is as defined above) or a D_3 - group (wherein D_3 is as defined above);

(4) the D group: a C2-C10 alkynyl group substituted with a (b)- R_4 - group [wherein, in (b)



G_1 , G_2 , G_4 and G_5 represent a methylene group which is

connected with the adjacent atom via a single bond and which may be optionally substituted with a methyl group, or a methine group which is connected with the adjacent atom via a double bond and which may be optionally substituted with a methyl group, and G_3 represents a single bond, a double bond, a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$ group (wherein R_1 is as defined above), or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$ group (wherein R_1 is as defined above); and R_4 is as defined above], a (c)- R_4- group (wherein, in (c)



J_1 , J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom; and R_4 is as defined above), a halogen atom, a $R_2-B_1-R_4-$ group (wherein R_2 , B_1 and R_4 are as defined above), a D_4-R_4- group (wherein D_4 and R_4 are as defined above), a D_5- group (wherein D_5 is as defined above), a D_1-R_4- group (wherein D_1 and R_4 are as defined above), a D_2- group (wherein D_2 is as defined above) or a D_3-R_4- group (wherein D_3 and R_4 are as defined above);

(5) the E group: an A_2-CO-R_5- group, provided that R_5

is not a vinylene group when A_2 is a hydroxyl group,

wherein A_2 represents

(i) an A_3-B_4- group

wherein A_3 represents a hydrogen atom, or a C1-C10

5 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10
alkenyl group optionally substituted with a halogen atom,
or a C3-C10 alkynyl group optionally substituted with a
halogen atom, or $R_a-(R_4)_m-$ group (wherein R_a represents a
phenyl group, a pyridyl group, a furyl group or a thienyl
10 group, which may be optionally substituted with a halogen
atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a
nitro group, and R_4 and m are as defined above), or a C1-
C10 alkyl group substituted with a (b)- R_4- group (wherein
(b) and R_4 are as defined above), a (c)- R_4- group (wherein
15 (c) and R_4 are as defined above), a $R_2-B_1-R_4-$ group (wherein
 R_2 , B_1 and R_4 are as defined above), a D_4-R_4- group (wherein
 D_4 and R_4 are as defined above), a D_5- group (wherein D_5 is
as defined above), a D_1-R_4- group (wherein D_1 and R_4 are as
defined above), a D_2- group (wherein D_2 is as defined
20 above), a D_3-R_4- group (wherein D_3 and R_4 are as defined
above) or an $A_4-SO_2-R_4-$ group { wherein A_4 represents a (b)-
group (wherein (b) is as defined above), a (c)- group
(wherein (c) is as defined above) or a $R_1R_1'N-$ group
(wherein R_1 and R_1' are as defined above), and R_4 is as
25 defined above}, and

B_4 represents an oxy group, a thio group or a -
 $N((O)_mR_1)$ - group (wherein R_1 and m are as defined above),
 provided that A_3 is not a hydrogen atom when B_4 is a thio
 group,

5 (ii) a $R_1-B_4-CO-R_4-B_4'$ - group

wherein R_1 , B_4 and R_4 are as defined above, B_4' is the
 same as or different from B_4 and has the same meaning as B_4
 has, provided that R_2 is not a hydrogen atom when B_4 is a
 thio group, or

10 a $D_2-R_4-B_4$ -group, wherein D_2 , R_4 and B_4 are as defined
 above,

(iii) a $R_2-SO_2-NR_1$ - group

wherein R_2 is as defined above, provided that a
 hydrogen atom is excluded; and R_1 is as defined above,

15 (iv) a (b)- group, wherein (b) is as defined above,

(v) a (c)- group, wherein (c) is as defined above, or

(vi) a $R_1A_1N-NR_1'$ - group, wherein R_1 , A_1 and R_1' are as
 defined above, and

R_5 represents a C2-C10 alkenylene group optionally

20 substituted with a halogen atom, or a C2-C10 alkynylene
 group;

(6) the F group: an $A_5-B_5-R_6$ - group

wherein A_5 represents a C2-C10 alkyl group substituted
 with a D_4 - group (wherein D_4 is as defined above), a D_1 -
 25 group (wherein D_1 is as defined above), a D_3 - group

(wherein D_3 is as defined above) or an A_4-SO_2- group
 (wherein A_4 is as defined above), or a C1-C10 alkyl group
 substituted with a R_2-B_1- group (wherein R_2 and B_1 are as
 defined above), a D_2- group (wherein D_2 is as defined
 5 above), a D_5- group (wherein D_5 is as defined above) or an
 A_2-CO- group (wherein A_2 is as defined above), B_5 represents
 a B_1- group (wherein B_1 is as defined above) or a $-NA_1-$
 group (wherein A_1 is as defined above), and R_6 represents a
 single bond or a C1-C10 alkylene group;

10 (7) the G group: an $A_6-B_5-R_6-$ group

wherein A_6 represents an (a)- R_4- group (wherein (a)
 and R_4 are as defined above), or a C2-C10 alkenyl group, or
 a C2-C10 alkynyl group, or a C2-C10 alkenyl group
 substituted with a halogen atom, a R_2-B_1- group (wherein R_2
 15 and B_1 are as defined above), a D_5- group (wherein D_5 is as
 defined above), a D_2- group (wherein D_2 is as defined
 above) or an A_2-CO- group (wherein A_2 is as define above),
 or a C2-C10 alkynyl group substituted with a halogen atom,
 a R_2-B_1- group (wherein R_2 and B_1 are as defined above), a
 20 D_5- group (wherein D_5 is as defined above), a D_2- group
 (wherein D_2 is as defined above) or an A_2-CO- group
 (wherein A_2 is as defined above), or a C3-C10 alkenyl group
 substituted with a (b)- group (wherein (b) is as defined
 above), a (c)- group (wherein (c) is as defined above), a
 25 D_4- group (wherein D_4 is as defined above), a D_1- group

(wherein D_1 is as defined above) or a D_3 - group (wherein D_3 is as defined above), or a C3-C10 alkynyl group substituted with a D_4 - group (wherein D_4 is as defined above), a D_1 - group (wherein D_1 is as defined above) or a D_3 - group (wherein D_3 is as defined above), and B_5 and R_6 are as defined above;

(8) the H group:

a D_2 -N(- $(O)_n$ - A_1)- R_6 - group (wherein D_2 , n , A_1 and R_6 are as defined above),

10 a D_2 - group (wherein D_2 is as defined above, provided that a cyano group is excluded),

a R_1 (R_1' (O) $_n$)N-C R_1'' =N- R_6 - group (wherein R_1 , R_1' , n and R_6 are as defined above, R_1'' is the same as or different from R_1 and has the same meaning as R_1 has),

15 a R_1 -(O) $_n$ -N=C R_1' -N R_2 - R_6 - group (wherein R_1 , n , R_1' , R_2 and R_6 are as defined above),

a R_2 - B_3 -N R_1 -CO-N R_1' - R_6 - group (wherein R_2 , B_3 , R_1 , R_1' and R_6 are as defined above),

20 a D_2 -CO-N R_1 - R_6 - group (wherein D_2 , R_1 and R_6 are as defined above) or

an A_2 -COCO-N R_1 - R_6 - group (wherein A_2 , R_1 and R_6 are as defined above);

(9) the I group:

25 an A_7 - B_6 -N((O) $_n$ R_1)- R_6 - group [wherein A_7 represents a C2-C10 alkenyl group optionally substituted with a halogen

atom, or a C2-C10 alkynyl group, or a C3-C10 haloalkynyl group, or a R₂-B₁-R₄- group (wherein R₂, B₁ and R₄ are as defined above), or a D₄-R₄- group (wherein D₄ and R₄ are as defined above), or a D₅-R₄- group (wherein D₅ and R₄ are as defined above), or a D₁-R₄- group (wherein D₁ and R₄ are as defined above), or a (b)-R₄- group (wherein (b) and R₄ are as defined above), or a (c)-R₄- group (wherein (c) and R₄ are as defined above), or a D₂-R₄- group (wherein D₂ and R₄ are as defined above), or a D₃-R₄- group (wherein D₃ and R₄ are as defined above), or an A₄-SO₂-R₄- group (wherein A₄ and R₄ are as defined above), or an A₂-CO-R₄- group (wherein A₂ and R₄ are as defined above), B₆ represents a carbonyl group or a thiocarbonyl group, and n, R₁ and R₆ are as defined above],

an A₈-CS-N((O)_nR₁)-R₆- group [wherein A₈ represents a hydrogen atom or a C1-C10 alkyl group optionally substituted with a halogen atom, and n, R₁ and R₆ are as defined above],

an A₇'-B₂'-B₃-N((O)_nR₁)-R₆- group [wherein A₇' represents a C3-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R₂-B₁-R₄'- group (wherein R₂ and B₁ are as defined above, and R₄' represents a C2-C10 alkylene group), or a D₄-R₄'- group (wherein D₄ and R₄' are as defined above), or a D₁-R₄'- group (wherein D₁

and R_4' are as defined above), or a (b)- R_4' - group (wherein (b) and R_4' are as defined above), or a (c)- R_4' - group (wherein (c) and R_4' are as defined above), or a D_2 - R_4 - group (wherein D_2 and R_4 are as defined above), or a D_3 - R_4' - group (wherein D_3 and R_4' are as defined above), or an A_2 -CO- R_4 - group (wherein A_2 and R_4 are as defined above), B_2' represents an oxy group, a thio group or a $-N((O)_nR_1')$ - group (wherein n' is the same as or different from n and has the same meaning as n has, and R_1' is as defined above), and B_3 , n , R_1 and R_6 are as defined above],

an A_8' - B_2' -CS- $N((O)_nR_1)$ - R_4 - group [wherein A_8' represents a C1-C10 alkyl group or a C2-C10 haloalkyl group, B_2' is as defined above, and n , R_1 and R_6 are as defined above],

an A_8' -S- B_3' - $N((O)_nR_1)$ - R_6 - group [wherein A_8' , n , R_1 and R_6 are as defined above, and B_3' represents a carbonyl group or a sulfonyl group] or

an A_7'' -SO₂- $N((O)_nR_1)$ - R_6 - group [wherein A_7'' represents a C2-C10 alkenyl group, or a C3-C10 alkenyl group substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_2 - B_1 - R_4' - group (wherein R_2 , B_1 and R_4' are as defined above), or a D_4 - R_4' - group (wherein D_4 and R_4' are as defined above), or a D_5 - R_4 - group (wherein D_5 and R_4 are as defined above), or a D_1 - R_4' - group (wherein D_1 and R_4' are as defined above), or a (b)-

R_4' - group (wherein (b) and R_4' are as defined above), or a
 (c)- R_4' - group (wherein (c) and R_4' are as defined above),
 or a D_2 - R_4 - group (wherein D_2 and R_4 are as defined above),
 or a NO_2 - R_4 - group (wherein R_4 is as defined above), or an
 5 A_2 -CO- R_4 - group (wherein A_2 and R_4 are as defined above),
 and n, R_1 and R_4 are as defined above];

(10) the J group:

an A_7 -CO- group (wherein A_7 is as defined above),
 an A_9 -CS- group (wherein A_9 represents A_7 or A_8),
 10 an $A_9'(O)_mN=C(A_9)$ - group (wherein A_9' represents A_7' or
 A_8' , and m and A_9 are as defined above),
 a D_2 -CO- group (wherein D_2 is as defined above),
 an A_2 -COCO- group (wherein A_2 is as defined above),
 an A_9 -CO- B_1' - R_6 - group (wherein A_9 and R_6 are as
 15 defined above, and B_1' represents an oxy group or a thio
 group, provided that A_9 is not A_8 when B_1' is an oxy group),
 an A_9 -CS- B_1' - R_6 - group (wherein A_9 , B_1' and R_6 are as
 defined above),
 an A_7'' -SO₂- B_1' - R_6 - group (wherein A_7'' , B_1' and R_6 are as
 20 defined above),
 an A_8 -SO₂- B_1' - R_6 - group (wherein A_8 , B_1' and R_6 are as
 defined above, provided that A_8 is not a hydrogen atom),
 an A_9' - B_2' - B_3 - B_1' - R_6 - group (wherein A_9' , B_2' , B_3 , B_1'
 and R_6 are as defined above), or
 25 a C2-C10 alkenyl group substituted with a (b)- group

(wherein (b) is as defined above) or a (c)- group (wherein (c) is as defined above);

(11) the K group: an $A_{10}-N((O)_nR_1)-CO-R_6-$ group

wherein A_{10} represents a hydrogen atom (provided that
 5 n is not 0), an $A_7''-SO_2-$ group (wherein A_7'' is as defined
 above), an A_8-SO_2- group (wherein A_8 is as defined above,
 provided that A_8 is not a hydrogen atom), an $A_9'O-$ group
 (wherein A_9' is as defined above, provided that n is not 1),
 an $A_9'-$ group (wherein A_9' is as defined above, provided
 10 that A_8' is excluded when n is 0), a R_2OCH_2- group (wherein
 R_2 is as defined above), an A_2-CO-R_4- group (wherein A_2 and
 R_4 are as defined above) or an $A_2-CO-CH(CH_2CO-A_2)-$ group
 (wherein A_2 is as defined above), and n , R_1 and R_6 are as
 defined above;

15 (12) the L group:

an $A_{10}'-N((O)_nR_1)-SO_2-R_6-$ group [wherein A_{10}' represents
 a hydrogen atom (provided that n is not 0), an $A_9'O-$ group
 (wherein A_9' is as defined above, provided that n is not 1),
 an $A_9'-$ group (wherein A_9' is as defined above, provided
 20 that A_8' is excluded when n is 0), a R_2-CO- group (wherein
 R_2 is as defined above), an A_2-CO-R_4- group (wherein A_2 and
 R_4 are as defined above) or an $A_2-CO-CH(CH_2CO-A_2)-$ group
 (wherein A_2 is as defined above), and n , R_1 and R_6 are as
 defined above],

25 an $A_9''R_1N-SO_2-N((O)_nR_1')-R_6-$ group [wherein A_9''

represents a hydrogen atom or an A_9' - group (wherein A_9' is as defined above), and R_1 , n , R_1' and R_6 are as defined above] or

5 a $(b)-SO_2-N((O)_nR_1')-R_6-$ group [wherein (b) , n , R_1' and R_6 are as defined above];

(13) the M group:

a $R_1(R_2S)C=N-R_6-$ group (wherein R_1 , R_2 and R_6 are as defined above),

10 a $R_2B(R_2'B')C=N-R_6-$ group (wherein R_2 and R_6 are as defined above, R_2' is the same as or different from R_2 and has the same meaning as R_2 has, and B and B' are the same or different and represent an oxy group or a thio group),

a $R_1R_1'N-(R_2S)C=N-R_6-$ group (wherein R_1 , R_1' , R_2 and R_6 are as defined above),

15 a $R_1N=C(SR_2)-NR_2'-R_6-$ group (wherein R_1 , R_2 , R_2' and R_6 are as defined above) or

a $R_1(R_1'O)N-R_6-$ group (wherein R_1 , R_1' and R_6 are as defined above);

(14) the N group: an $A_{11}-P(=O)(OR_1')-R_4-$ group

20 wherein A_{11} represents a R_1- group (wherein R_1 is as defined above), a R_1O-R_6- group (wherein R_1 and R_6 are as defined above) or a $R_1OCO-CHR_0-$ group (wherein R_1 and R_0 are as defined above), and R_1' and R_4 are as defined above;

25 III. in $(Y_A)_q$, Y_A is a substituent on a carbon atom and

represents a group included in the following X group or Y group, q represents 0, 1, 2, 3 or 4, the sum of p (wherein p is as defined above) and q is 5 or less, Y_{As} are the same or different when q is 2 or more, and the adjacent two same or different Y_{As} together may form a group included in the Z group to be fused to the A ring when q is 2 or more,

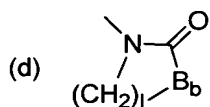
(1) the X group: a M_a- group

wherein M_a represents a R_b- group (wherein R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a R_c-B_a-R_d- group (wherein R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d- group (wherein R_d is as defined above), a R_e-CO-R_d- group (wherein R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d- group (wherein R_e and R_d are as defined above), a R_eO-CO-R_d- group (wherein R_e and R_d are as defined above), a HO-CO-CH=CH- group, a R_eR_e'N-R_d- group (wherein R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as R_e has, and R_d is as defined above), a R_e-CO-NR_e'-R_d- group (wherein R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d- group

(wherein R_b , R_e and R_d are as defined above), a $R_eR_e'N-CO-R_d$ -group (wherein R_e , R_e' and R_d are as defined above), a $R_eR_e'N-CO-NR_e''-R_d$ -group (wherein R_e , R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as R_e has, and R_d is as defined above), a $R_eR_e'N-C(=NR_e'')-NR_e'''-R_d$ -group (wherein R_e , R_e' , R_e'' and R_e''' are the same or different, R_e , R_e' and R_e'' are as defined above, R_e''' has the same meaning as R_e has, and R_d is as defined above), a $R_b-SO_2-NR_e-R_d$ -group (wherein R_b , R_e and R_d are as defined above), a $R_eR_e'N-SO_2-R_d$ -group (wherein R_e , R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group;

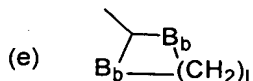
(2) the Y group: a M_b-R_d -group, wherein M_b represents a M_c -group

[wherein M_c represents a M_d-R_d' -group [wherein M_d represents a phenyl group optionally substituted with a M_a -group (wherein M_a is as defined above), a pyridyl group optionally substituted with a M_a -group (wherein M_a is as defined above), a naphthyl group optionally substituted with a M_a -group (wherein M_a is as defined above), a (b)-group (wherein (b) is as defined above), a (c)-group (wherein (c) is as defined above), a (d)-group



(wherein l is 2, 3 or 4, B_b represents an oxy group or a

thio group) or an (e)- group



(wherein l and B_b are as defined above), and R_d' is the same as or different from R_d and has the same meaning as R_d has]],

a M_c-B_a- group (wherein M_c and B_a are as defined above), a M_c-CO- group (wherein M_c is as defined above), a M_c-CO-O- group (wherein M_c is as defined above), a M_cO-CO- group (wherein M_c is as defined above), a M_cR_eN- group (wherein M_c and R_e are as defined above), a M_c-CO-NR_e- group (wherein M_c and R_e are as defined above), a M_cO-CO-NR_e- group (wherein M_c and R_e are as defined above), a M_cR_eN-CO- group (wherein M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'- group (wherein M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''- group (wherein M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO₂-NR_e- group (wherein M_c and R_e are as defined above) or a M_cR_eN-SO₂- group (wherein M_c and R_e are as defined above), and R_d is as defined above;

(3) the Z group:

a -N=C(Y_a)-Y_a'- group (wherein Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, a thio group, or an imino group optionally

substituted with a C1-C10 alkyl group),

a $-Y_b-Y_b'-Y_b''-$ group (wherein Y_b and Y_b'' are the same or different, and represent a methylene group, an oxy group, a thio group, a sulfinyl group, or an imino group

5 optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or

10 a $-Y_c-O-Y_c'-O-$ group (wherein Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

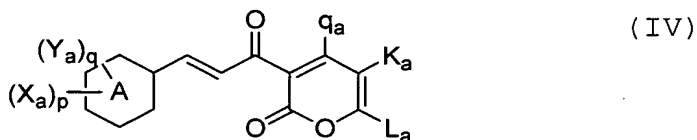
IV. Q_A represents a hydroxyl group, a (b)- group (wherein (b) is as defined above), an $A_9-B_6-B_c-$ group [wherein A_9 and B_6 are as defined above, and B_c represents an oxy group or
15 a $-N((O)_mR_1)-$ group (wherein m and R_1 are as defined above), provided that B_c is not a sulfonyl group when A_9 is a hydrogen atom], an $A_7''-SO_2-B_c-$ group (wherein A_7'' and B_c are as defined above), an $A_8-SO_2-B_c-$ group (wherein A_8 and B_c are as defined above, provided that A_8 is not a hydrogen
20 atom), a $R_1R_1'N-SO_2-B_c-$ group (wherein R_1 , R_1' and B_c are as defined above), a (b)- SO_2-B_c- group (wherein (b) and B_c are as defined above), an $A_9'-B_c-$ group (wherein A_9' and B_c are as defined above), a $D_5-R_c-B_c-$ group (wherein D_5 , R_4 and B_c are as defined above), a $M_c-B_3-B_c-$ group (wherein M_c , B_3 and
25 B_c are as defined above) or a M_c-B_c- group (wherein M_c and

B_c are as defined above);

V. K_A represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_A represents a hydrogen atom, a C1-C10 alkyl group or a M_b -group (M_b is as defined above), or K_A and L_A may form a C1-C10 alkylene group or a $-C(M_a')=C(M_a'')-C(M_a''')=C(M_a''')$ -group (M_a' , M_a'' , M_a''' and M_a'''' are the same or different, are the same as or different from M_a , and represent a hydrogen atom or M_a) ; and

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

4. A cinnamoyl compound represented by the formula (IV):



wherein

A represents a benzene ring or a pyridine ring,

X_a is a substituent on a carbon atom, and represents a

C1-C10 alkyl group substituted with a cyano group; a C1-C10
 alkyl group substituted with a tetrahydropyran-4-ylidene
 group; a C2-C10 alkenyl group substituted with a halogen
 atom or a cyano group; a C2-C10 alkenyl group substituted
 5 with a C1-C10 alkoxy carbonyl group; a C3-C10 alkynyl group
 substituted with a hydroxyl group; an $a_0-r_1-b-r_1'$ - group
 {wherein a_0 represents a methyl group substituted with a
 C1-C10 alkylthio group, a methyl group substituted with a
 C1-C10 alkylsulfinyl group, a methyl group substituted with
 10 a C1-C10 alkylsulfonyl group, a C2-C10 alkenyl group, a C2-
 C10 alkynyl group, a r_2O-CO- group (wherein r_2 represents a
 C1-C10 alkyl group, or a C2-C10 alkyl group substituted
 with a hydroxyl group), a carboxyl group, a $rr'N-CO-$ group
 (wherein r and r' are the same or different, and represent
 15 a hydrogen atom or a C1-C10 alkyl group), an $a_1-NH-CO-$
 group (wherein a_1 represents a C2-C10 alkyl group
 substituted with a C1-C10 alkoxy group), an $a_1'-CO-$ group
 (wherein a_1' represents a morpholino group), a $rr'N-CH_2-$
 group (wherein r and r' are as defined above), a $r_0-(O)_1-$
 20 $CONH-CH_2-$ group (wherein r_0 represents a C1-C10 alkyl group,
 and 1 represents 0 or 1), a $r-OCH_2-$ group (wherein r is as
 defined above), a r_0-CO- group (wherein r_0 is as defined
 above), a cyano group, or a sulfomethyl group, r_1
 represents a C1-C10 alkylene group, r_1' represents a single
 25 bond or a C1-C10 alkylene group, and b represents an oxy

group, a thio group, a sulfinyl group, a sulfonyl group or a imino group}; an a_2 -y-CO-NH- group (wherein a_2 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group, and y represents an oxy group or an imino group); a r_0 O-COCO-NH- group (wherein r_0 is as defined above); an a_3 -z-NH- group (wherein a_3 represents a C2-C10 alkenyl group, or a C1-C10 alkyl group substituted with a C1-10 alkoxy group, a C1-C10 alkoxy carbonyl group, a carboxy group or a cyano group, and z represents a carbonyl group or a sulfonyl group); an a_4 -NHCO- group (wherein a_4 represents a C1-C10 alkoxy group, or a C3-C10 alkenyloxy group, or a r_0 -SO₂- group (wherein r_0 is as defined above), or a C2-C10 alkyl group substituted with a hydroxyl group or a C1-C10 alkoxy group, or a C1-C10 alkyl group substituted with a r O-CO- group (wherein r is as defined above), a cyano group or an aminocarbonyl group, or a r O-CO-(r O-COCH₂)CH- group (wherein r is as defined above)); an a_5 -NHSO₂- group (wherein a_5 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group); a r_0 ON=CH- group (wherein r_0 is as defined above); a r_0 NHCSNH- group (wherein r_0 is as defined above); a r_0 NHC(-Sr₀')=N- group (wherein r_0 is as defined above, r_0' is the same as the different from r_0 and has the same meaning as r_0 has); or a (r_0 O)₂P(=O)CH₂- group (wherein r_0 is as defined above);

p represents 1, 2 or 3, and when p is 2 or more, X_as

are the same or different;

Y_a represents a halogen atom, a nitro group, a $r_0\text{CO-NH-}$ group (wherein r_0 is as defined above), a C1-C10 alkyl group or a C1-C10 alkoxy group;

5 q represents 0, 1 or 2, and when q is 2 or more, Y_{as} are the same or different;

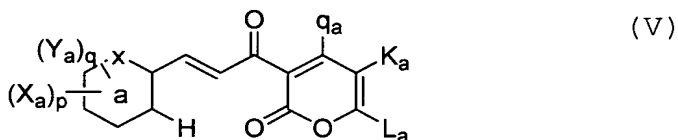
q_a represents a $r_a\text{-O-}$ group {wherein r_a represents a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, a C1-C10 alkyl group substituted
10 with a $r_0r_0'\text{N-CH}_2\text{-}$ group (wherein r_0 and r_0' are as defined above), a $r\text{OCH}_2\text{-}$ group (wherein r is as defined above), a $r_0\text{-CO-}$ group (wherein r_0 is as defined above), a C1-C10 alkoxy carbonyl group, a carboxy group, an aminocarbonyl group or a cyano group, or a $r_3\text{-r}_1\text{-}$ group (wherein r_3
15 represents a phenyl group or a pyridyl group, and r_1 is as defined above)}; a piperidino group; a morpholino group; or a $r_4r_4'\text{N-}$ group (wherein r_4 and r_4' are the same or different, and represent a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, or a
20 C2-C10 alkyl group substituted with a C1-C10 alkoxy group, provided that r_4 and r_4' are not a hydrogen atom at the same time);

K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, and L_a represents a hydrogen atom or a C1-C10 alkyl group; or
25 C10 alkyl group; or

K_a and L_a together may form a C1-C10 alkylene group or a 1,3-butadienylene group;

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

5. A cinnamoyl compound represented by the formula (V):



wherein

a represents a benzene ring or a pyridine ring;

x represents a methine group or a nitrogen atom;

X_a is a substituent on a carbon atom, and represents a C1-C10 alkyl group substituted with a cyano group; a C1-C10 alkyl group substituted with a tetrahydropyran-4-ylidene group; a C2-C10 alkenyl group substituted with a halogen atom or a cyano group; a C2-C10 alkenyl group substituted with a C1-C10 alkoxycarbonyl group; a C3-C10 alkynyl group

substituted with a hydroxyl group; an $a_0-r_1-b-r_1'$ - group
 {wherein a_0 represents a methyl group substituted with a
 C1-C10 alkylthio group, a methyl group substituted with a
 C1-C10 alkylsulfinyl group, a methyl group substituted with
 5 a C1-C10 alkylsulfonyl group, a C2-C10 alkenyl group, a C2-
 C10 alkynyl group, a r_2O-CO- group (wherein r_2 represents a
 C1-C10 alkyl group, or a C2-C10 alkyl group substituted
 with a hydroxyl group), a carboxyl group, a $rr'N-CO-$ group
 (wherein r and r' are the same or different, and represent
 10 a hydrogen atom or a C1-C10 alkyl group), an $a_1-NH-CO-$
 group (wherein a_1 represents a C2-C10 alkyl group
 substituted with a C1-C10 alkoxy group), an $a_1'-CO-$ group
 (wherein a_1' represents a morpholino group), a $rr'N-CH_2-$
 group (wherein r and r' are as defined above), a $r_0-(O)_1-$
 15 $CONH-CH_2-$ group (wherein r_0 represents a C1-C10 alkyl group,
 and 1 represents 0 or 1), a $r-OCH_2-$ group (wherein r is as
 defined above), a r_0-CO- group (wherein r_0 is as defined
 above), a cyano group, or a sulfomethyl group, r_1
 represents a C1-C10 alkylene group, r_1' represents a single
 20 bond or a C1-C10 alkylene group, and b represents an oxy
 group, a thio group, a sulfinyl group, a sulfonyl group or
 a imino group}; an $a_2-y-CO-NH-$ group (wherein a_2 represents
 a C2-C10 alkyl group substituted with a C1-C10 alkoxy group,
 and y represents an oxy group or an imino group); a r_0O-
 25 $COCO-NH-$ group (wherein r_0 is as defined above); an a_3-z-

NH- group (wherein a_3 represents a C2-C10 alkenyl group, or a C1-C10 alkyl group substituted with a C1-10 alkoxy group, a C1-C10 alkoxy carbonyl group, a carboxy group or a cyano group, and z represents a carbonyl group or a sulfonyl

5 group); an a_4 -NHCO- group (wherein a_4 represents a C1-C10 alkoxy group, or a C3-C10 alkenyloxy group, or a r_0 -SO₂- group (wherein r_0 is as defined above), or a C2-C10 alkyl group substituted with a hydroxyl group or a C1-C10 alkoxy group, or a C1-C10 alkyl group substituted with a r O-CO- group (wherein r is as defined above), a cyano group or an aminocarbonyl group, or a r O-CO-(r O-COCH₂)CH- group (wherein r is as defined above)); an a_5 -NHSO₂- group (wherein a_5 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group); a r_0 ON=CH- group (wherein r_0 is as defined above); a r_0 NHCSNH- group (wherein r_0 is as defined above); a r_0 NHC(-Sr₀')=N- group (wherein r_0 is as defined above, r_0' is the same as the different from r_0 and has the same meaning as r_0 has); or a (r_0 O)₂P(=O)CH₂- group (wherein r_0 is as defined above);

20 p represents 1, 2 or 3, and when p is 2 or more, X_as are the same or different;

Y_a represents a halogen atom, a nitro group, a r_0 CO-NH- group (wherein r_0 is as defined above), a C1-C10 alkyl group or a C1-C10 alkoxy group;

25 q represents 0, 1 or 2, and when q is 2 or more, Y_as

are the same or different;

q_a represents a r_a -O- group {wherein r_a represents a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, a C1-C10 alkyl group substituted
 5 with a r_0r_0' -N-CH₂- group (wherein r_0 and r_0' are as defined above), a r OCH₂- group (wherein r is as defined above), a r_0 -CO- group (wherein r_0 is as defined above), a C1-C10 alkoxy carbonyl group, a carboxy group, an aminocarbonyl group or a cyano group, or a r_3 - r_1 -group (wherein r_3
 10 represents a phenyl group or a pyridyl group, and r_1 is as defined above)}; a piperidino group; a morpholino group; or a r_4r_4' -N- group (wherein r_4 and r_4' are the same or different, and represent a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, or a
 15 C2-C10 alkyl group substituted with a C1-C10 alkoxy group, provided that r_4 and r_4' are not a hydrogen atom at the same time);

t_a represents a r_b - group (wherein r_b is the same as or different from r_a , and has the same meaning as r_a has) or a
 20 r_3' - group (wherein r_3' is the same as or different from r_3 , and has the same meaning as r_3 has);

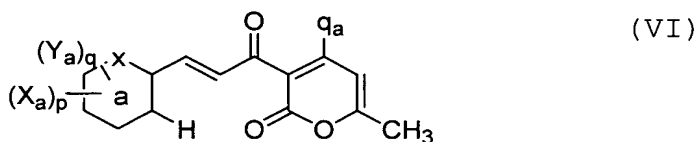
K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, and L_a represents a hydrogen atom or a C1-C10 alkyl group; or

25 K_a and L_a together may form a C1-C10 alkylene group or

a 1,3-butadienylene group;

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

6. A 2H-pyran-2-one compound represented by the formula (VI):



wherein

a represents a benzene ring or a pyridine ring;

x represents a methine group or a nitrogen atom;

X_a is a substituent on a carbon atom, and represents a C1-C10 alkyl group substituted with a cyano group; a C1-C10 alkyl group substituted with a tetrahydropyran-4-ylidene group; a C2-C10 alkenyl group substituted with a halogen atom or a cyano group; a C2-C10 alkenyl group substituted with a C1-C10 alkoxycarbonyl group; a C3-C10 alkynyl group

substituted with a hydroxyl group; an $a_0-r_1-b-r_1'$ - group
 {wherein a_0 represents a methyl group substituted with a
 C1-C10 alkylthio group, a methyl group substituted with a
 C1-C10 alkylsulfinyl group, a methyl group substituted with
 5 a C1-C10 alkylsulfonyl group, a C2-C10 alkenyl group, a C2-
 C10 alkynyl group, a r_2O-CO- group (wherein r_2 represents a
 C1-C10 alkyl group, or a C2-C10 alkyl group substituted
 with a hydroxyl group), a carboxyl group, a $rr'N-CO-$ group
 (wherein r and r' are the same or different, and represent
 10 a hydrogen atom or a C1-C10 alkyl group), an $a_1-NH-CO-$
 group (wherein a_1 represents a C2-C10 alkyl group
 substituted with a C1-C10 alkoxy group), an $a_1'-CO-$ group
 (wherein a_1' represents a morpholino group), a $rr'N-CH_2-$
 group (wherein r and r' are as defined above), a $r_0-(O)_1-$
 15 $CONH-CH_2-$ group (wherein r_0 represents a C1-C10 alkyl group,
 and 1 represents 0 or 1), a $r-OCH_2-$ group (wherein r is as
 defined above), a r_0-CO- group (wherein r_0 is as defined
 above), a cyano group, or a sulfomethyl group, r_1
 represents a C1-C10 alkylene group, r_1' represents a single
 20 bond or a C1-C10 alkylene group, and b represents an oxy
 group, a thio group, a sulfinyl group, a sulfonyl group or
 a imino group}; an $a_2-y-CO-NH-$ group (wherein a_2 represents
 a C2-C10 alkyl group substituted with a C1-C10 alkoxy group,
 and y represents an oxy group or an imino group); a r_0O-
 25 $COCO-NH-$ group (wherein r_0 is as defined above); an a_3-z-

NH- group (wherein a_3 represents a C2-C10 alkenyl group, or a C1-C10 alkyl group substituted with a C1-10 alkoxy group, a C1-C10 alkoxy carbonyl group, a carboxy group or a cyano group, and z represents a carbonyl group or a sulfonyl

5 group); an a_4 -NHCO- group {wherein a_4 represents a C1-C10 alkoxy group, or a C3-C10 alkenyloxy group, or a r_0 -SO₂- group (wherein r_0 is as defined above), or a C2-C10 alkyl group substituted with a hydroxyl group or a C1-C10 alkoxy group, or a C1-C10 alkyl group substituted with a r_0 -CO- group (wherein r is as defined above), a cyano group or an aminocarbonyl group, or a r_0 -CO-(r_0 -COCH₂)CH- group (wherein r is as defined above)}; an a_5 -NHSO₂- group (wherein a_5 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group); a r_0 ON=CH- group (wherein r_0 is as defined above); a r_0 NHCSNH- group (wherein r_0 is as defined above); a r_0 NHC(-Sr₀')=N- group (wherein r_0 is as defined above, r_0' is the same as the different from r_0 and has the same meaning as r_0 has); or a (r_0 O)₂P(=O)CH₂- group (wherein r_0 is as defined above);

20 p represents 1, 2 or 3, and when p is 2 or more, X_as are the same or different;

Y_a represents a halogen atom, a nitro group, a r_0 CO-NH- group (wherein r_0 is as defined above), a C1-C10 alkyl group or a C1-C10 alkoxy group;

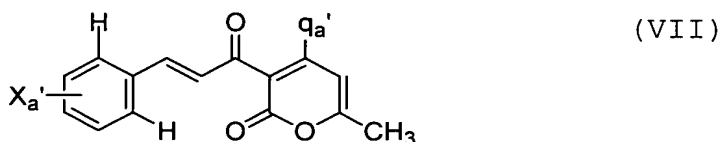
25 q represents 0, 1 or 2, and when q is 2 or more, Y_as

are the same or different;

q_a represents a r_a -O- group {wherein r_a represents a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, a C1-C10 alkyl group substituted
 5 with a r_0r_0' N-CH₂- group (wherein r_0 and r_0' are as defined above), a r OCH₂- group (wherein r is as defined above), a r_0 -CO- group (wherein r_0 is as defined above), a C1-C10 alkoxy carbonyl group, a carboxy group, an aminocarbonyl group or a cyano group, or a r_3 - r_1 -group (wherein r_3
 10 represents a phenyl group or a pyridyl group, and r_1 is as defined above)); a piperidino group; a morpholino group; or a r_4r_4' N- group (wherein r_4 and r_4' are the same or different, and represent a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, or a
 15 C2-C10 alkyl group substituted with a C1-C10 alkoxy group, provided that r_4 and r_4' are not a hydrogen atom at the same time);

the term "as defined above" used for the same symbols among plural substituents means that the plural
 20 substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

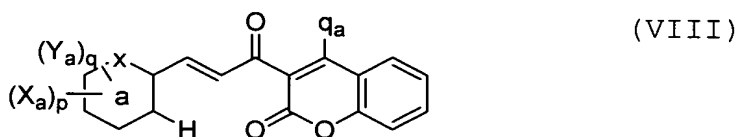
7. A 2H-pyran-2-one compound represented by the formula (VII):



wherein

$X_{a'}$ represents a C1-C10 alkyl group substituted with a cyano group, or a C2-C10 alkenyl group substituted with a halogen atom or a cyano group, or an $a_0'-r_1$ -O-group (a_0' represents a methyl group substituted with a C1-C10 alkylthio group, a C2-C10 alkenyl group, a C2-C10 alkynyl group, a $HOCH_2$ -group or a cyano group, and r_1 represents a C1-C10 alkylene group), or an a_6 -CONH-group (a_6 represents a C1-C10 alkyl group substituted with a C1-C10 alkoxy group, or a C2-C10 alkoxy group substituted with a C1-C10 alkoxy group), or an a_7 -NHCO-group (a_7 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group, or a C1-C10 alkyl group substituted with a C1-C10 alkoxycarbonyl group); $q_{a'}$ represents an amino group substituted with a C3-C10 alkynyl group, a piperidino group, a morpholino group or a $r_{a'}$ -O-group ($r_{a'}$ represents a hydrogen atom, a C1-C10 alkyl group or a C3-C10 alkenyl group).

8. A 2H-1-benzopyran-2-one compound represented by the formula (VIII):



wherein

a represents a benzene ring or a pyridine ring;

5 x represents a methine group or a nitrogen atom;

X_a is a substituent on a carbon atom, and represents a C1-C10 alkyl group substituted with a cyano group; a C1-C10 alkyl group substituted with a tetrahydropyran-4-ylidene group; a C2-C10 alkenyl group substituted with a halogen atom or a cyano group; a C2-C10 alkenyl group substituted with a C1-C10 alkoxy carbonyl group; a C3-C10 alkynyl group substituted with a hydroxyl group; an a₀-r₁-b-r₁'- group {wherein a₀ represents a methyl group substituted with a C1-C10 alkylthio group, a methyl group substituted with a C1-C10 alkylsulfinyl group, a methyl group substituted with a C1-C10 alkylsulfonyl group, a C2-C10 alkenyl group, a C2-C10 alkynyl group, a r₂O-CO- group (wherein r₂ represents a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a hydroxyl group), a carboxyl group, a rr'-N-CO- group (wherein r and r' are the same or different, and represent a hydrogen atom or a C1-C10 alkyl group), an a₁-NH-CO-

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15

20

group (wherein a_1 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group), an a_1' -CO- group (wherein a_1' represents a morpholino group), a rr' N-CH₂- group (wherein r and r' are as defined above), a r_0 -(O)₁-

5 CONH-CH₂- group (wherein r_0 represents a C1-C10 alkyl group, and l represents 0 or 1), a r -OCH₂- group (wherein r is as defined above), a r_0 -CO- group (wherein r_0 is as defined above), a cyano group, or a sulfomethyl group, r_1 represents a C1-C10 alkylene group, r_1' represents a single

10 bond or a C1-C10 alkylene group, and b represents an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a imino group}; an a_2 -y-CO-NH- group (wherein a_2 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group, and y represents an oxy group or an imino group); a r_0 O-

15 COCO-NH- group (wherein r_0 is as defined above); an a_3 -z-NH- group (wherein a_3 represents a C2-C10 alkenyl group, or a C1-C10 alkyl group substituted with a C1-10 alkoxy group, a C1-C10 alkoxy carbonyl group, a carboxy group or a cyano group, and z represents a carbonyl group or a sulfonyl

20 group); an a_4 -NHCO- group (wherein a_4 represents a C1-C10 alkoxy group, or a C3-C10 alkenyloxy group, or a r_0 -SO₂- group (wherein r_0 is as defined above), or a C2-C10 alkyl group substituted with a hydroxyl group or a C1-C10 alkoxy group, or a C1-C10 alkyl group substituted with a r O-CO-

25 group (wherein r is as defined above), a cyano group or an

aminocarbonyl group, or a $rO-CO-(rO-COCH_2)CH-$ group
 (wherein r is as defined above)); an a_5-NHSO_2- group
 (wherein a_5 represents a C2-C10 alkyl group substituted
 with a C1-C10 alkoxy group); a $r_0ON=CH-$ group (wherein r_0
 5 is as defined above); a $r_0NHCSNH-$ group (wherein r_0 is as
 defined above); a $r_0NHC(-Sr_0')=N-$ group (wherein r_0 is as
 defined above, r_0' is the same as the different from r_0 and
 has the same meaning as r_0 has); or a $(r_0O)_2P(=O)CH_2-$ group
 (wherein r_0 is as defined above);

10 p represents 1, 2 or 3, and when p is 2 or more, X_{as}
 are the same or different;

Y_a represents a halogen atom, a nitro group, a r_0CO-
 $NH-$ group (wherein r_0 is as defined above), a C1-C10 alkyl
 group or a C1-C10 alkoxy group;

15 q represents 0, 1 or 2, and when q is 2 or more, Y_{as}
 are the same or different;

q_a represents a r_a-O- group {wherein r_a represents a
 hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group,
 a C3-C10 alkynyl group, a C1-C10 alkyl group substituted
 20 with a $r_0r_0'N-CH_2-$ group (wherein r_0 and r_0' are as defined
 above), a $rOCH_2-$ group (wherein r is as defined above), a
 r_0-CO- group (wherein r_0 is as defined above), a C1-C10
 alkoxy carbonyl group, a carboxy group, an aminocarbonyl
 group or a cyano group, or a r_3-r_1 -group (wherein r_3
 25 represents a phenyl group or a pyridyl group, and r_1 is as

defined above)); a piperidino group; a morpholino group; or a r_4r_4' N- group (wherein r_4 and r_4' are the same or different, and represent a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, or a C2-C10 alkyl group substituted with a C1-C10 alkoxy group, provided that r_4 and r_4' are not a hydrogen atom at the same time);

t_a represents a r_b - group (wherein r_b is the same as or different from r_a , and has the same meaning as r_a has) or a r_3' - group (wherein r_3' is the same as or different from r_3 , and has the same meaning as r_3 has);

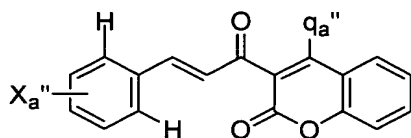
K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, and L_a represents a hydrogen atom or a C1-C10 alkyl group; or

K_a and L_a together may form a C1-C10 alkylene group or a 1,3-butadienylene group;

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

9. A 2H-1-benzopyran-2-one compound represented by the

formula (IX):

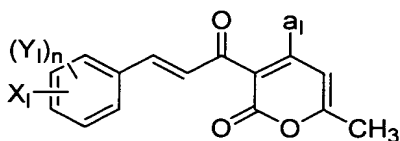


(IX)

wherein

X_a'' represents a C1-C10 alkoxy group substituted with a cyano group or a hydroxymethyl group, or an a_6 -CONH-group
 5 (a_6 represents a C1-C10 alkyl group substituted with a C1-C10 alkoxy group, or a C2-C10 alkoxy group substituted with a C1-C10 alkoxy group), or an a_7 -NHCO-group (a_7 represents a C2-C10 alkyl group substituted with a hydroxy group, or a C2-C10 alkyl group substituted with a C1-C10 alkoxy group,
 10 or a C1-C10 alkyl group substituted with a C1-C10 alkoxy group substituted with a C1-C10 alkoxy group), and q_a'' represents a hydroxy group, a C1-C10 alkoxy group or a piperidino group;

10. A 2H-pyran-2-one compound represented by the formula
 15 (X):

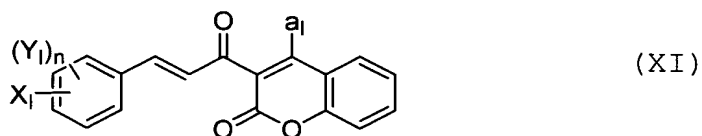


(X)

wherein

X_I represents a C2-C4 alkenyl group substituted with a cyano group, an A_I-R_I-O -group (A_I represents a C1-C4 alkylthio group, a C2-C4 alkenyl group, a C2-C4 alkynyl group, a C1-C4 alkoxycarbonyl group, a carboxy group or a cyano group, and R_I represents a C1-C4 alkylene group), an $A_{II}-(y)_m-z-NH$ -group (A_{II} represents a C2-C4 alkenyl group, or a C1-C4 alkyl group substituted with a C1-C4 alkoxy group, a C1-C4 alkoxycarbonyl group, a carboxy group or a cyano group, y represents an oxy group or an imino group, z represents a carbonyl group or a sulfonyl group, and m represents 0 or 1) or an $A_{III}-NHCO$ -group (A_{III} represents a methanesulfonyl group, or a C1-C4 alkyl group substituted with a hydroxy group, a C1-C4 alkoxy group, a C1-C4 alkoxycarbonyl group, a carboxy group or a cyano group), a_I represents a hydroxy group, a C1-C4 alkoxy group, a C2-C4 alkenyloxy group, a C2-C4 alkynyloxy group, a C1-C4 alkylamino group, a C2-C4 alkenylamino group, a C2-C4 alkynylamino group, a morpholino group or a piperidino group, Y_I represents a halogen atom, a nitro group, a C1-C4 alkyl group or a C1-C4 alkoxy group, n represents 0, 1 or 2 and, when n is 2, Y_I s may be different;

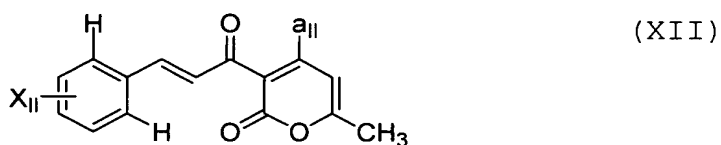
11. A 2H-1-benzopyran-2-one compound represented by the formula (XI):



wherein

X_I represents a C2-C4 alkenyl group substituted with a cyano group, an A_I-R_I-O -group (A_I represents a C1-C4 alkylthio group, a C2-C4 alkenyl group, a C2-C4 alkynyl group, a C1-C4 alkoxycarbonyl group, a carboxy group or a cyano group, and R_I represents a C1-C4 alkylene group), an $A_{II}-(y)_m-z-NH$ -group (A_{II} represents a C2-C4 alkenyl group, or a C1-C4 alkyl group substituted with a C1-C4 alkoxy group, a C1-C4 alkoxycarbonyl group, a carboxy group or a cyano group, y represents an oxy group or an imino group, z represents a carbonyl group or a sulfonyl group, and m represents 0 or 1) or an $A_{III}-NHCO$ -group (A_{III} represents a methanesulfonyl group, or a C1-C4 alkyl group substituted with a hydroxy group, a C1-C4 alkoxy group, a C1-C4 alkoxycarbonyl group, a carboxy group or a cyano group), a_I represents a hydroxy group, a C1-C4 alkoxy group, a C2-C4 alkenyloxy group, a C2-C4 alkynyloxy group, a C1-C4 alkylamino group, a C2-C4 alkenylamino group, a C2-C4 alkynylamino group, a morpholino group or a piperidino group, Y_I represents a halogen atom, a nitro group, a C1-C4 alkyl group or a C1-C4 alkoxy group, n represented 0, 1 or 2 and, when n is 2, Y_I 's may be different;

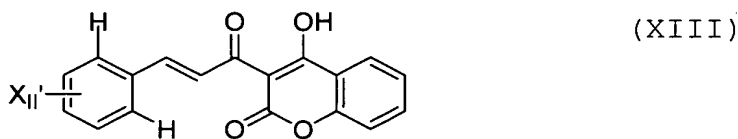
12. A 2H-pyran-2-one compound represented by the formula (XII):



wherein

5 X_{II} represents an allyloxy group, a propargyloxy group, a cyanomethoxy group, a methoxyacetyl amino group, a methoxycarbonylmethylaminocarbonyl group or a 2-cyanoethenyl group, and a_{II} represents a hydroxy group, a methoxy group or a morpholino group;

10 13. A 2H-1-benzopyran-2-one compound represented by the formula (XIII):



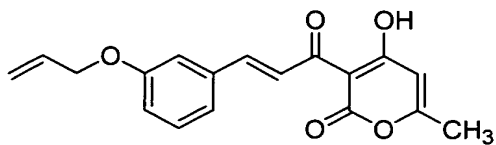
wherein

15 X_{II'} represents a cyanomethoxy group, a methoxyacetyl amino group or a 2-hydroxyethylaminocarbonyl group;

14. A 2H-pyran-2-one compound represented by the formula

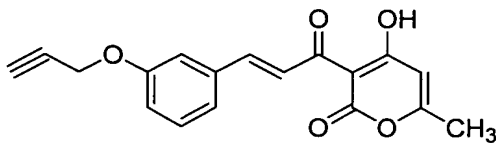
(XIV) :

(XIV) ;



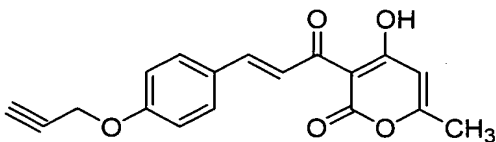
15. A 2H-pyran-2-one compound represented by the formula (XV) :

(XV) ;



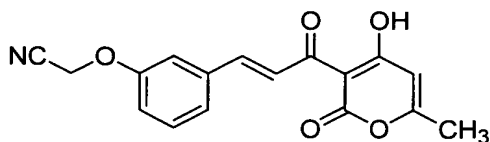
16. A 2H-pyran-2-one compound represented by the formula (XVI) :

(XVI) ;

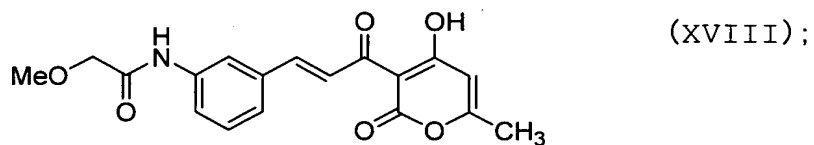


17. A 2H-pyran-2-one compound represented by the formula (XVII) :

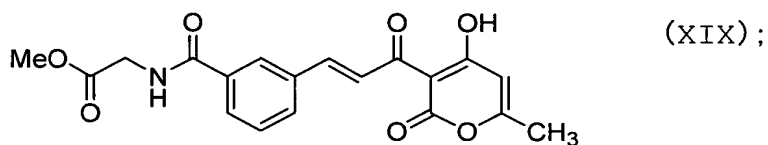
(XVII) ;



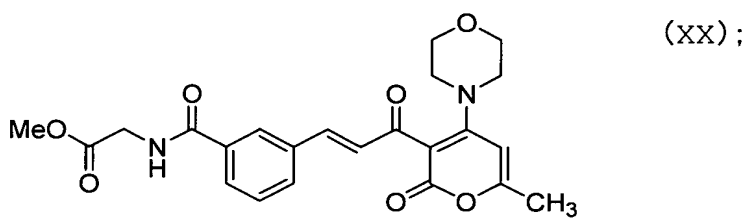
18. A 2H-pyran-2-one compound represented by the formula (XVIII):



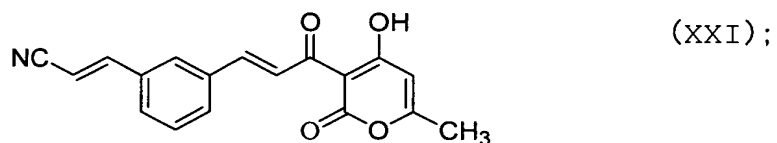
19. A 2H-pyran-2-one compound represented by the formula (XIX):



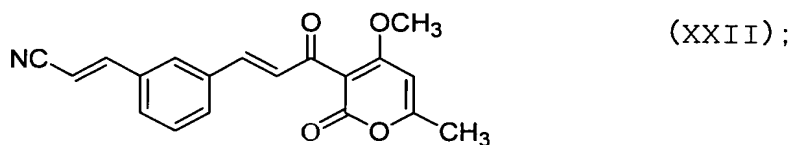
20. A 2H-pyran-2-one compound represented by the formula (XX):



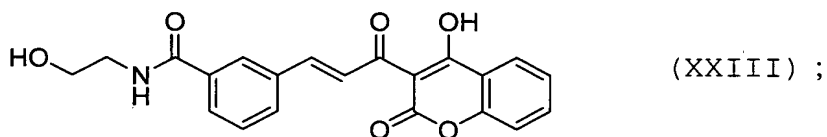
21. A 2H-pyran-2-one compound represented by the formula (XXI):



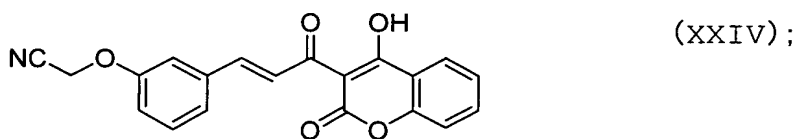
22. A 2H-pyran-2-one compound represented by the formula (XXII):



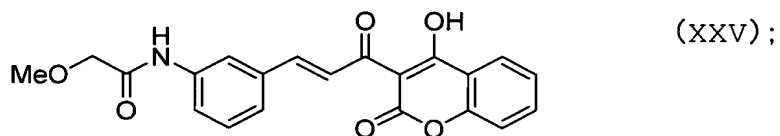
23. A 2H-a-benzopyran-2-one compound represented by the formula (XXIII):



5 24. A 2H-a-benzopyran-2-one compound represented by the formula (XXIV):

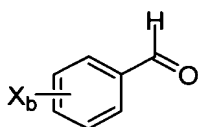


25. A 2H-1-benzopyran-2-one compound represented by the formula (XXV):



26. A benzaldehyde derivative represented by the formula

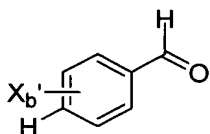
(XXVI-1):



(XXVI-1) ;

[wherein X_b represents a $\text{MeO-COCH}_2\text{NHCO}$ -group, a $\text{MeOCH}_2\text{CHO-CO-NH}$ -group, a $\text{MeOCH}_2\text{CH}_2\text{NH-CO-NH}$ -group, a $\text{MeSO}_2\text{NH-CO}$ -group, a $\text{NCCH}_2\text{NH-CO}$ -group, a $\text{F}_2\text{C=CH}$ -group, a $\text{MeO-CO-(MeO-COCH}_2\text{-)CH}$ -group, a $\text{MeOCH}_2\text{CH}_2\text{NH-SO}_2$ -group, a MeO-NHCO -group or a $\text{CH}_2=\text{CHCH}_2\text{O-NHCO}$ -group.];

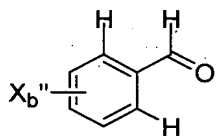
the formula (XXVI -2):



(XXVI-2)

[wherein X_b' represents a $\text{MeOCH}_2\text{CO-NH}$ -group or a $\text{MeOCH}_2\text{CH}_2\text{NH-CO}$ -group.];

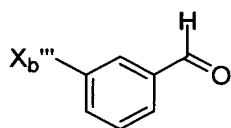
the formula (XXVI-3):



(XXVI-3)

[wherein X_b'' represents a $\text{MeSCH}_2\text{CH}_2\text{O}$ -group, a $\text{HOCH}_2\text{CH}_2\text{OCH}_2$ -group or a $\text{NC-CH}_2\text{CH}_2$ -group.] or

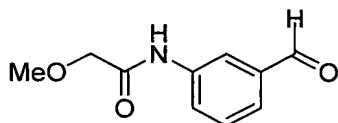
the formula (XXVI-4):



(XXVI-4)

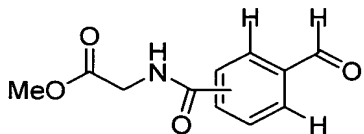
[wherein X_b''' represents a NCCH=CH -group, a $\text{H}_2\text{NCOCH}_2\text{O}$ -group, a MeCOCH_2O -group, a $\text{CH}_3\text{O-COCH}_2\text{SCH}_2$ -group, a tetrahydropyran-4-ylidenemethyl group, a $\text{CH}_3\text{O-COCO-NH}$ -group or a $(\text{CH}_3\text{O})_2\text{P(=O)CH}_2$ -group.]; or 6-formyl-2-[(2-methoxyethyl)aminocarbonyl]pyridine;

27. A benzaldehyde derivative represented by the formula (XXVII):



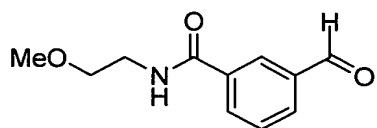
(XXVII)

28. A benzaldehyde derivative represented by the formula (XXVIII):



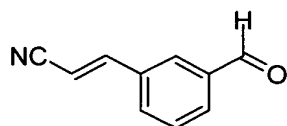
(XXVIII)

29. A benzaldehyde derivative represented by the formula (XXIX):



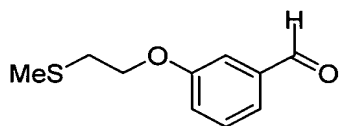
(XXIX)

30. A benzaldehyde derivative represented by the formula
(XXX):



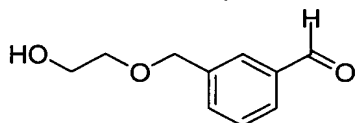
(XXX)

31. A benzaldehyde derivative represented by the formula
(XXXI):



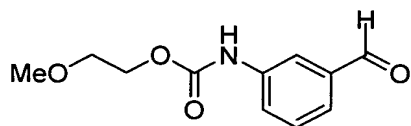
(XXXI)

5 32. A benzaldehyde derivative represented by the formula
(XXXII):



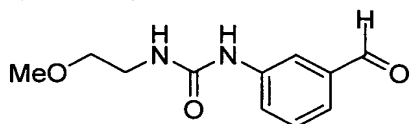
(XXXII)

33. A benzaldehyde derivative represented by the formula
(XXXIII):



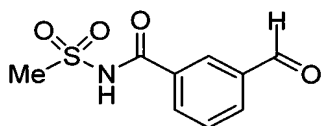
(XXXIII)

34. A benzaldehyde derivative represented by the formula (XXXIV):



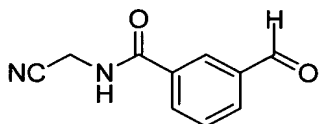
(XXXIV)

35. A benzaldehyde derivative represented by the formula (XXXV):



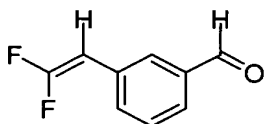
(XXXV)

5 36. A benzaldehyde derivative represented by the formula (XXXVI):



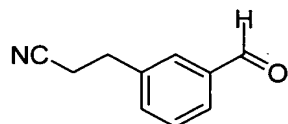
(XXXVI)

37. A benzaldehyde derivative represented by the formula (XXXVII):



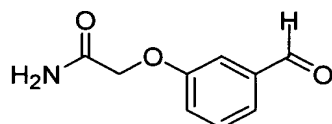
(XXXVII)

38. A benzaldehyde derivative represented by the formula (XXXVIII):



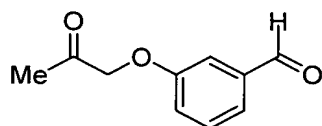
(XXXVIII)

39. A benzaldehyde derivative represented by the formula (XXXIX):



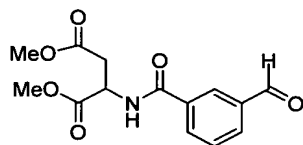
(XXXIX)

40. A benzaldehyde derivative represented by the formula (XL):



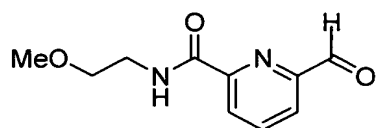
(XL)

41. A benzaldehyde derivative represented by the formula (XLI):



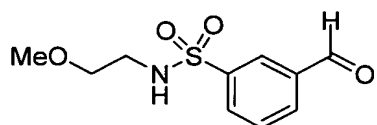
(XLI)

42. A pyridinecarbaldehyde derivative represented by the formula (XLII):



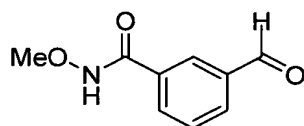
(XLII)

43. A benzaldehyde derivative represented by the formula (XLIII):



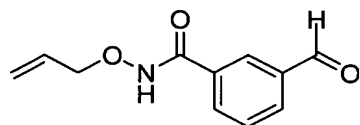
(XLIII)

44. A benzaldehyde derivative represented by the formula (XLIV):



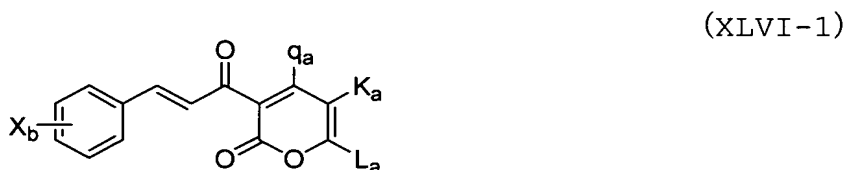
(XLIV)

5 45. A benzaldehyde derivative represented by the formula (XLV):

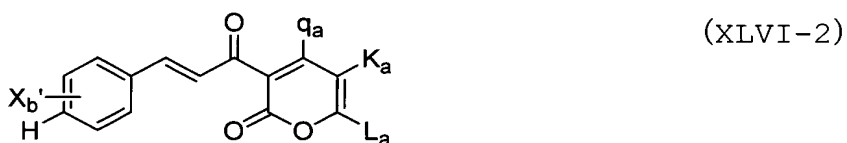


(XLV)

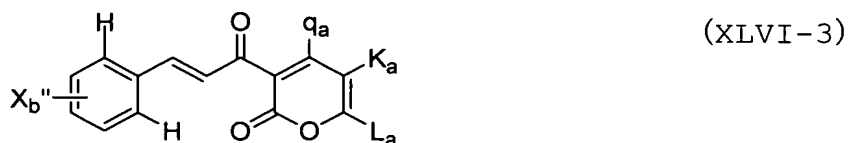
46. A process for producing a cynamoyl compound represented by the formula (XLVI-1):



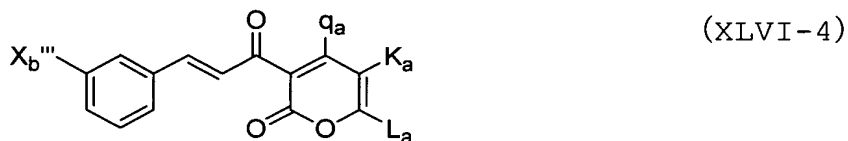
wherein X_b represents a $\text{MeO-COCH}_2\text{NHCO-}$ group, a $\text{MeOCH}_2\text{CH}_2\text{O-CO-NH-}$ group, a $\text{MeOCH}_2\text{CH}_2\text{NH-CO-NH-}$ group, a $\text{MeSO}_2\text{NH-CO-}$ group, a $\text{NCCH}_2\text{NH-CO-}$ group, a $\text{F}_2\text{C=CH-}$ group, a $\text{MeO-CO-(MeO-COCH}_2\text{-)CH-}$ group, a $\text{MeOCH}_2\text{CH}_2\text{NH-SO}_2\text{-}$ group, a MeO-NHCO- group or a $\text{CH=CHCH}_2\text{O-NHCO-}$ group, and q_a , K_a and L_a are as defined below, the formula (XLVI-2):



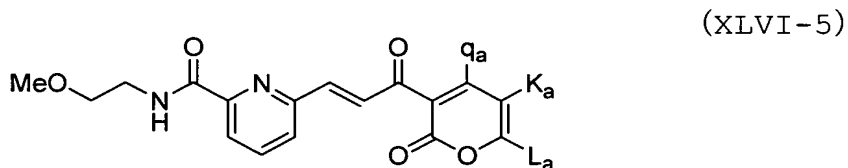
wherein X_b' represents a $\text{MeOCH}_2\text{CO-NH-}$ group or a $\text{MeOCH}_2\text{CH}_2\text{NH-CO-}$ group, q_a , K_a and L_a are as defined below, the formula (XLVI-3):



wherein X_b'' represents a $\text{MeSCH}_2\text{CH}_2\text{O}$ -group, a $\text{HOCH}_2\text{CH}_2\text{OCH}_2$ -group or a $\text{NC-CH}_2\text{CH}_2$ -group, and q_a , K_a and L_a are as defined below, the formula (XLVI-4):



wherein X_b''' represents a NCCH=CH -group, a $\text{H}_2\text{NCOCH}_2\text{O}$ -group, a MeCOCH_2O -group, a $\text{CH}_3\text{O-COCH}_2\text{SCH}_2$ -group, a tetrahydropyran-4-ylidenemethyl group, a $\text{CH}_3\text{O-COCO-NH}$ -group or a $(\text{CH}_3\text{O})_2\text{P(=O)CH}_2$ -group, and q_a , K_a and L_a are as defined below, or the formula (XLVI-5):

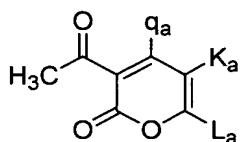


wherein q_a , K_a and L_a are as defined below,

which comprises reacting a benzaldehyde derivative represented by the formula (XXVI-1), the formula (XXVI-2),

the formula (XXVI-3) or the formula (XXVI-4), or 6-formyl-2-[(2-methoxyethyl)aminocarbonyl]pyridine as defined in the above item 26, with a compound represented by the formula (XLVI):

5



(XLVI)

wherein

q_a represents a r_a-O-group {wherein r_a represents a hydrogen atom; a C1-C10 alkyl group; a C3-C10 alkenyl group; a C3-C10 alkynyl group; a C1-C10 alkyl group substituted with a r₀r₀'N-CH₂- group (wherein r₀ and r₀' are the same or different, and represent a C1-C10 alkyl group), a rOCH₂- group (wherein r represents a hydrogen atom or a C1-C10 alkyl group), a r₀-CO- group (wherein r₀ is as defined above), a C1-C10 alkoxy carbonyl group, a carboxy group, an aminocarbonyl group or a cyano group; or a r₃-r₁- group (wherein r₃ represents a phenyl group or a pyridyl group, and r₁ represents a C1-C10 alkylene group)}, a piperidino group, a morpholino group, or a r₄r₄'N- group (wherein r₄ and r₄' are the same or different, and represent a hydrogen atom, a C1-C10 alkyl group, a C3-C10

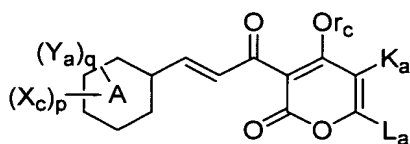
alkenyl group, a C3-C10 alkynyl group, or a C2-C10 alkyl group substituted with a C1-C10 alkoxy group, provided that r_4 and r_4' are not a hydrogen atom at the same time),

K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, and L_a represents a hydrogen atom or a C1-C10 alkyl group, or

K_a and L_a together may form a C1-C10 alkylene group or a 1,3-butadienylene group, and

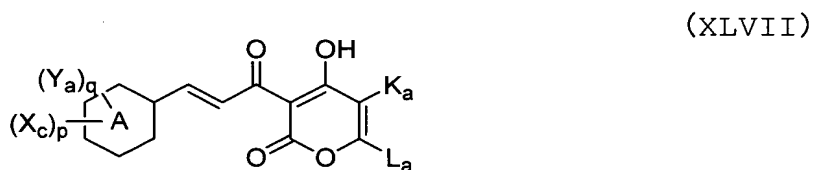
the term "as defined above (or below)" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above (or below) and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

47. A process for producing a cinnamoyl compound represented by the formula (XLVII''):



(XLVII'')

wherein A, X_c, Y_a, p, q, r_c, K_a and L_a are as defined below,
 and the term "as defined above (or below)" used for the
 same symbols among plural substituents means that the
 plural substituents independently represent the same
 5 meaning as that described above (or below) and, among the
 plural substituents, although the selection range of
 substituents to be selected is the same, selected
 substituents may be the same or different as long as they
 are selected within the range; which comprises reacting a
 10 cinnamoyl compound represented by the formula (XLVII):



wherein

A represents a benzene ring or a pyridine ring,

X_c is a substituent on a carbon atom, and represents a
 C1-C10 alkyl group substituted with a cyano group; a C1-C10
 15 alkyl group substituted with a tetrahydropyran-4-ylidene
 group; a C2-C10 alkenyl group substituted with a halogen
 atom or a cyano group; a C2-C10 alkenyl group substituted
 with a C1-C10 alkoxycarbonyl group; a C2-C10 alkynyl group
 substituted with a hydroxymethyl group; an a_{0c}-r₁-b-r₁'-
 20 group {wherein a_{0c} represents a methyl group substituted

with a C1-C10 alkylthio group, a methyl group substituted
 with a C1-C10 alkylsulfinyl group, a methyl group
 substituted with a C1-C10 alkylsulfonyl group, a C2-C10
 alkenyl group, a C2-C10 alkynyl group, a r_2O-CO- group
 5 (wherein r_2 represents a C1-C10 alkyl group, or a C2-C10
 alkyl group substituted with a hydroxyl group), a $rr'N-CO-$
 group (wherein r and r' are the same or different, and
 represent a hydrogen atom or a C1-C10 alkyl group), an a_1-
 $NH-CO-$ group (wherein a_1 represents a C2-C10 alkyl group
 10 substituted with a C1-C10 alkoxy group), an $a_1'-CO-$ group
 (wherein a_1' represents a morpholino group), a $rr'N-CH_2-$
 group (wherein r and r' are as defined above), a $r_0-(O)_1-$
 $CONH-CH_2-$ group (wherein r_0 represents a C1-C10 alkyl group,
 and 1 represents 0 or 1), a $r-OCH_2-$ group (wherein r is as
 15 defined above), a r_0-CO- group (wherein r_0 is as defined
 above), or a cyano group, r_1 represents a C1-C10 alkylene
 group, r_1' represents a single bond or a C1-C10 alkylene
 group, and b represents an oxy group, a thio group, a
 sulfinyl group, a sulfonyl group or a imino group}; an a_2-
 20 $y-CO-NH-$ group (wherein a_2 represents a C2-C10 alkyl group
 substituted with a C1-C10 alkoxy group, and y represents an
 oxy group or an imino group); a $r_0O-COCO-NH-$ group (wherein
 r_0 is as defined above); an $a_3-z-NH-$ group (wherein a_3
 represents a C2-C10 alkenyl group, or a C1-C10 alkyl group
 25 substituted with a C1-10 alkoxy group, a C1-C10

alkoxycarbonyl group or a cyano group, and z represents a carbonyl group or a sulfonyl group); an a_4 -NHCO- group {wherein a_4 represents a C1-C10 alkoxy group, or a C3-C10 alkenyloxy group, or a r_0 -SO₂- group (wherein r_0 is as defined above), or a C2-C10 alkyl group substituted with a hydroxyl group or a C1-C10 alkoxy group, or a C1-C10 alkyl group substituted with a r_0 O-CO- group (wherein r_0 is as defined above), a cyano group or an aminocarbonyl group, or a r_0 O-CO-(r_0 O-COCH₂)CH- group (wherein r_0 is as defined above)); an a_5 -NHSO₂- group (wherein a_5 represents a C2-C10 alkyl group substituted with a C1-C10 alkoxy group); a r_0 ON=CH- group (wherein r_0 is as defined above); a r_0 NHCSNH- group (wherein r_0 is as defined above); a r_0 NHC(-Sr₀')=N- group (wherein r_0 is as defined above, r_0' is the same as the different from r_0 and has the same meaning as r_0 has); or a (r_0 O)₂P(=O)CH₂- group (wherein r_0 is as defined above);

p represents 1, 2 or 3, and when p is 2 or more, X_cs are the same or different;

Y_a represents a halogen atom, a nitro group, a r_0 CO-NH- group (wherein r_0 is as defined above), a C1-C10 alkyl group or a C1-C10 alkoxy group;

q represents 0, 1 or 2, and when q is 2 or more, Y_as are the same or different;

K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, and L_a represents a hydrogen atom or a C1-

C10 alkyl group, or

K_a and L_a together may form a C1-C10 alkylenylene group or a 1,3-butadienylenylene group, and

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range, with a compound represented by the formula (XLVII'):

r_c-V (XLVII')

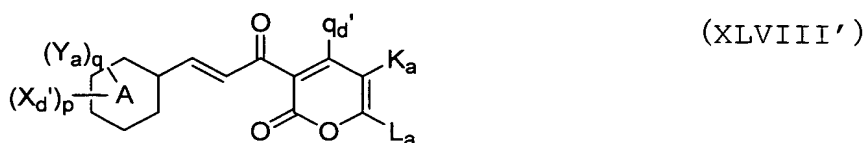
wherein r_c represents a t_c' -group { wherein t_c' represents a C1-C10 alkyl group; a C3-C10 alkenyl group; a C3-C10 alkynyl group; a C1-C10 alkyl group substituted with a $r_0r_0'N-CH_2-$ group (wherein r_0 and r_0' are as defined above), a $rOCH_2-$ group (wherein r is as defined above), a r_0-CO- group (wherein r_0 is as defined above), a C1-C10 alkoxy carbonyl group, an aminocarbonyl group or a cyano group; or a r_3-r_1- group (wherein r_3 represents a phenyl group or a pyridyl group, and r_1 is as defined above)}, and V represents a leaving group, and

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as

that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

5

48. A process for producing a cinnamoyl compound represented by the formula (XLVIII'):



wherein

10 A is as defined below,

X_d' is a substituent on a carbon atom, and represents an a_{0d}' - r_1 - b - r_1' - group (wherein a_{0d}' represents a carboxy group, and r_1 , r_1' and b are as defined below), a HO-COCO-NH- group, an a_{3d}' - z -NH- group (wherein a_{3d}' represents a
15 C1-C10 alkyl group substituted with a carboxy group, and z is as defined below), or an a_{4d}' -NHCO- group (wherein a_{4d}' represents a C1-C10 alkyl group substituted with a carboxy group, or a HO-CO-(HO-COCH₂)CH- group),

p is as defined below and, and when p is 2 or more,

20 X_d' 's are the same or different,

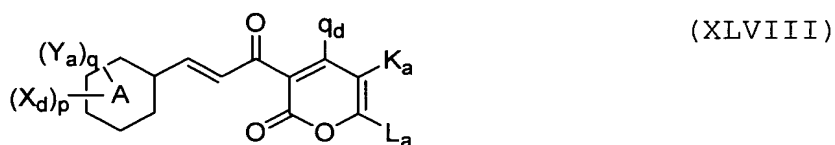
Y_a and q are as defined below,

q_d' represents a r_d'' -O- group {wherein r_d'' represents a hydrogen atom; a C1-C10 alkyl group; a C3-C10 alkenyl group; a C3-C10 alkynyl group; a C1-C10 alkyl group substituted with a r_0r_0' N-CH₂- group (wherein r_0 and r_0' are as defined below), a r OCH₂- group (wherein r is as defined below), a r_0 -CO- group (wherein r_0 is as defined below), a carboxy group, an aminocarbonyl group or a cyano group; or a r_3 - r_1 - group (wherein r_3 represents a phenyl group or a pyridyl group, and r_1 is as defined below)}, a piperidino group, a morpholino group, or a r_4r_4' N- group (wherein r_4 and r_4' are as defined below, provided that they are not hydrogen atom at the same time),

K_a and L_a are as defined below, and

the term "as defined above (or below)" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above (or below) and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

which comprises hydrolyzing a cinnamoyl compound represented by the formula (XLVIII):



wherein

A represents a benzene ring or a pyridine ring,

X_d is a substituent on a carbon atom, and represents an $a_{0d}-r_1-b-r_1'$ - group {wherein a_{0d} represents a r_2O-CO - group (wherein r_2 represents a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a hydroxy group), r_1 represents a C1-C10 alkylene group, r_1' represents a single bond or a C1-C10 alkylene group, and b represents an oxy group, a thio group, a sulfinyl group, a sulfonyl group or an imino group}, a $r_0O-COCO-NH$ - group (wherein r_0 represents a C1-C10 alkyl group), an $a_{3d}-z-NH$ - group (wherein a_{3d} represents a C1-C10 alkyl group substituted with a C1-C10 alkoxy carbonyl group, and z represents a carbonyl group or a sulfonyl group), or an $a_{4d}-NHCO$ - group {wherein a_{4d} represents a C1-C10 alkyl group substituted with a r_0O-CO - group (wherein r_0 is as defined above), or a $r_0O-CO-(r_0O-COCH_2)CH$ - group (wherein r_0 is as defined above)},

p represents 1, 2 or 3, and when p is 2 or more, X_d s are the same or different,

Y_a represents a halogen atom, a nitro group, a r_0CO -

NH- group (wherein r_0 is as defined above), a C1-C10 alkyl group or a C1-C10 alkoxy group,

q represents 0, 1 or 2, and when q is 2 or more, Y_a s are the same or different;

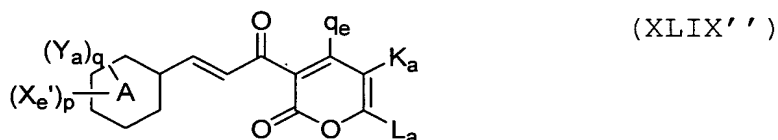
5 q_d represents a r_d -O- group {wherein r_d represents a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, a C1-C10 alkyl group substituted with a r_0r_0' N-CH₂- group (wherein r_0 is as defined above, and r_0' is the same as or different from r_0 and has the
10 same meaning as r_0 has), a r OCH₂- group (wherein r is as defined above), a r_0 -CO- group (wherein r_0 is as defined above), a C1-C10 alkoxycarbonyl group, a carboxy group, an aminocarbonyl group or a cyano group, or a r_3 - r_1 -group (wherein r_3 represents a phenyl group or a pyridyl group,
15 and r_1 is as defined above)}; a piperidino group; a morpholino group; or a r_4r_4' N- group (wherein r_4 and r_4' represent a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, or a C2-C10 alkyl group substituted with a C1-C10 alkoxy group, provided that
20 they are not a hydrogen atom at the same time),,

K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, and L_a represents a hydrogen atom or a C1-C10 alkyl group, or

K_a and L_a together may form a C1-C10 alkylene group or
25 a 1,3-butadienylene group,

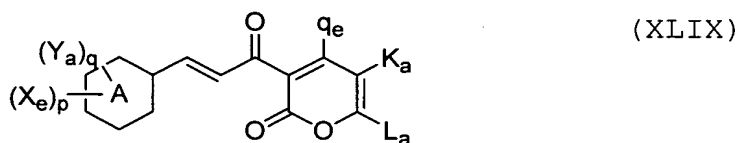
the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

49. A process for producing a cinnamoyl compound represented by the formula (XLIX''):



wherein X_e' represents an $a_{0e}'-r_1''-b''$ - group {wherein a_{0e}' represents an a_{0e} - group (wherein a_{0e} is as defined below), a 3-sulfopropyl group or a 4-sulfobutyl group, and r_1'' and b'' are as defined below}, and A, Y_a , p, q, q_e , K_a and L_a are as defined below, and the term "as defined above (or below)" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above (or below) and, among the plural substituents, although the selection range of substituents to be selected is the same, selected

substituents may be the same or different as long as they are selected within the range;
 which comprises reacting a cinnamoyl compound represented by the formula (XLIX):



5 wherein

A represents a benzene ring or a pyridine ring,

X_e is a substituent on a carbon atom, and represents a H-b''- group (wherein b'' represents an oxy group or a thio group),

10 p represents 1, 2 or 3 and, when p is 2 or more, X_es are the same or different,

Y_a represents a halogen atom, a nitro group, a r₀CO-NH- group (wherein r₀ is a C1-C10 alkyl group), a C1-C10 alkyl group or a C1-C10 alkoxy group,

15 q represents 0, 1 or 2, and when q is 2 or more, Y_as are the same or different;

q_e represents a r_e-O- group {wherein r_e represents a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, a C1-C10 alkyl group substituted with a
 20 r₀r₀'N-CH₂- group (wherein r₀ is as defined above, and r₀'

is the same as or different from r_0 and has the same meaning as r_0 has), a $r\text{OCH}_2$ - group (wherein r represents a hydrogen atom or a C1-C10 alkyl group), a $r_0\text{-CO-}$ group (wherein r_0 is as defined above), a C1-C10 alkoxy carbonyl group, an aminocarbonyl group or a cyano group, or a $r_3\text{-}r_1$ - group (wherein r_3 represents a phenyl group or a pyridyl group, and r_1 represents a C1-C10 alkylene group)); a piperidino group; a morpholino group; or a $r_4r_4'\text{N-}$ group (wherein r_4 and r_4' represent a hydrogen atom, a C1-C10 alkyl group, a C3-C10 alkenyl group, a C3-C10 alkynyl group, or a C2-C10 alkyl group substituted with a C1-C10 alkoxy group, provided that they are not a hydrogen atom at the same time),

K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, and L_a represents a hydrogen atom or a C1-C10 alkyl group, or

K_a and L_a together may form a C1-C10 alkylene group or a 1,3-butadienylene group, and

the term "as defined above" used for the same symbols among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range,

with a compound represented by the formula (XLIX'):



wherein

a_{0e} represents a methyl group substituted with a C1-
 5 C10 alkylthio group, a methyl group substituted with a C1-
 C10 alkylsulfinyl group, a methyl group substituted with a
 C1-C10 alkylsulfonyl group, a C2-C10 alkenyl group, a C2-
 C10 alkynyl group, a $r_2\text{O}-\text{CO}-$ group (wherein r_2 represents a
 C1-C10 alkyl group, or a C2-C10 alkyl group substituted
 10 with a hydroxy group), a $rr'\text{N}-\text{CO}-$ group (wherein r and r'
 are the same or different, and represent a hydrogen atom or
 a C1-C10 alkyl group), an $a_1-\text{NH}-\text{CO}-$ group (wherein a_1
 represents a C2-C10 alkyl group substituted with a C1-C10
 alkoxy group), an $a_1'-\text{CO}-$ group (wherein a_1' represents a
 15 morpholino group), a $rr'\text{N}-\text{CH}_2-$ group (wherein r is as
 defined above, r' is the same as or different from r and
 has the same meaning as r has), a $r_0-(\text{O})_1-\text{CONH}-\text{CH}_2-$ group
 (wherein r_0 is as defined above, and 1 represents 0 or 1),
 a $r-\text{OCH}_2-$ group (wherein r is as defined above), a $r_0-\text{CO}-$
 20 group (wherein r_0 is as defined above) or a cyano group,

r_1'' is the same as or different from r_1 and has the
 same meaning as r_1 has, and V' represents a leaving group
 or a hydroxy group, or 1,3-propanesultone or 1,4-
 butanesultone

25 the term "as defined above" used for the same symbols

among plural substituents means that the plural substituents independently represent the same meaning as that described above and, among the plural substituents, although the selection range of substituents to be selected is the same, selected substituents may be the same or different as long as they are selected within the range;

50. Use of a compound according to any one of claims 1 to 25 as an active ingredient for suppressing transcription of a Type I collagen gene;

51. A composition for suppressing transcription of a Type I collagen gene, which comprises a compound according to any one of claims 1 to 25 and an inert carrier;

52. Use of a compound according to any one of claims 1 to 25 as an active ingredient for decreasing expression of a Type I collagen gene to induce a reduction in accumulation of collagen and thereby improving tissue fibrosis;

53. A composition for improving tissue fibrosis, which comprises a compound according to any one of claims 1 to 25 and an inert carrier;

54. A method for improving tissue fibrosis, which comprises administering an effective amount of a compound according to any one of claims 1 to 25 to a mammal in need thereof;

5

55. Use of a compound according to any one of claims 1 to 25 as an active ingredient for suppressing the activity of TGF- β ;

10

56. A composition for suppressing the activity of TGF- β , which comprises a compound according to any one of claims 1 to 25 and an inert carrier;

15

57. Use of a compound according to any one of claims 1 to 25 as an active ingredient for inhibiting a promoting effect of TGF- β on transition to a hair regression phase to induce extension of a hair growth phase and thereby providing hair-growing effect;

20

58. A composition for hair growth which comprises a compound according to any one of claims 1 to 25 and an inert carrier;

25

59. A method for growing hair, which comprises administering an effective amount of a compound according

to any one of claims 1 to 25 to a mammal in need thereof;

60. Use of a compound according to any one of claims
1 to 25 as an active ingredient for treating chronic renal
5 failure;

61. An agent for treating chronic renal failure,
which comprises a compound according to any one of claims 1
to 25 and an inert carrier;
10

62. Use of a compound according to claim 2 as an
active ingredient for suppressing transcription of a Type I
collagen gene;

15 63. A composition for suppressing transcription of a
Type I collagen gene, which comprises a compound according
to claim 2 and an inert carrier;

64. Use of a compound according to claim 3 as an
20 active ingredient for suppressing transcription of a Type I
collagen gene;

65. A composition for suppressing transcription of a
Type I collagen gene, which comprises a compound according
25 to claim 3 and an inert carrier;

66. Use of a compound according to claim 4 as an active ingredient for suppressing transcription of a Type I collagen gene;

5

67. A composition for suppressing transcription of a Type I collagen gene, which comprises a compound according to claim 4 and an inert carrier;

10

68. Use of a compound according to claim 10 as an active ingredient for suppressing transcription of a Type I collagen gene;

15

69. A composition for suppressing transcription of a Type I collagen gene, which comprises a compound according to claim 10 and an inert carrier;

20

70. Use of a compound according to claim 11 as an active ingredient for suppressing transcription of a Type I collagen gene;

25

71. A composition for suppressing transcription of a Type I collagen gene, which comprises a compound according to claim 11 and an inert carrier;

72. Use of a compound according to claim 14 to 25 as an active ingredient for suppressing transcription of a Type I collagen gene;

5 73. A composition for suppressing transcription of a Type I collagen gene, which comprises a compound according to claim 14 to 25 and an inert carrier.